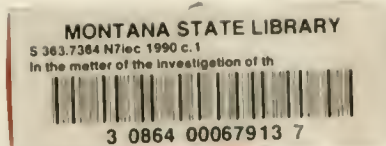


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BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
OF THE STATE OF MONTANA
HELENA, MONTANA

IN THE MATTER OF:) REMEDIAL INVESTIGATION/
THE INVESTIGATION OF THE) FEASIBILITY STUDY
ENVIRONMENTAL CONDITIONS) ADMINISTRATIVE ORDER ON CONSENT
AT AND EMANATING FROM THE)
MONTANA POLE AND TREATING) DOCKET NO. SF-90-00001
PLANT IN BUTTE, MONTANA)

TO: ATLANTIC RICHFIELD COMPANY, a Delaware corporation, acting
through its division ARCO Coal Company, authorized to
transact business in the State of Montana through the ARCO
Coal Company

Respondent.

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6. Quality Assurance Project Plan
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BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
OF THE STATE OF MONTANA
HELENA, MONTANA

IN THE MATTER OF:) REMEDIAL INVESTIGATION/
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Coal Company;

Respondent.

I.

JURISDICTION

This Remedial Investigation/Feasibility Study (RI/FS) Administrative Order on Consent (the "Consent Order") is issued pursuant to the authorities vested in the State of Montana ("State"), acting by and through its Department of Health and Environmental Sciences ("DHES"), by Montana Code Annotated ("MCA") §§ 75-10-711, and 75-10-715.

II.

DEFINITIONS

Words used in this Consent Order are to be taken and understood in their natural and ordinary sense unless this Consent Order indicates that a different meaning was intended.

1 Whenever the following terms are used in this Consent Order, or
2 in documents incorporated herein or appended hereto, the
3 following meanings shall apply:

4 A. "CECRA" means the Comprehensive Environmental Cleanup
5 and Responsibility Act, codified at MCA §§ 75-10-701 to -724
6 (1989).

7 B. "Consent Order" shall mean this document together with
8 all attachments hereto and appendices incorporated herein.

9 C. "Contractor" shall mean the company or companies
10 retained by, or on behalf of, Respondent to undertake and
11 complete the Work or any part thereof. A Contractor, and any
12 subcontractors retained by the Contractor, shall be deemed to be
13 related by contract to the Respondent.

14 D. "Day" shall mean calendar Day, unless business Day is
15 specified. Any deliverables, notices or other written documents
16 that under the terms of the Consent Order would be due on a
17 Saturday, Sunday or State of Montana holiday (as identified by
18 the Governor or by state law) shall be due on the following
19 business Day.

20 E. "DHES" means the Montana Department of Health and
21 Environmental Sciences.

22 F. "Dispose" or "Disposal" means the discharge, injection,
23 deposit, dumping, spilling, leaking, or placing of any Hazardous
24 or Deleterious Substances into or onto the land or water so that
25 the Hazardous or Deleterious Substances may enter the environ-



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1 ment or be emitted into the air or discharged into any waters,
2 including ground waters.

3 G. "EPA" means the United States Environmental Protection
4 Agency.

5 H. "Facility" means the Montana Pole National Priority
6 List site, located at 220 Greenwood Avenue in Butte, Silver Bow
7 County, Montana, in the southern 1/2 of Section 24, and the SE
8 1/4 of Section 23, T3N, R8W. The Facility includes the
9 remaining plant facilities, on-site storage buildings (pole
10 barns) and contents, oil recovery system, and soils, surface
11 water and ground water where contaminants associated with the
12 operations of the Montana Pole and Treating Plant facility have
13 come to be located.

14 I. "Fund" shall mean the Environmental Quality Protection
15 Fund established in MCA § 75-10-704.

16 J. "Hazardous or Deleterious Substance" shall mean:

17 1. a substance that because of its quantity, con-
18 centration, or physical, chemical, or infectious charac-
19 teristics may pose an imminent and substantial threat to
20 public health, safety, welfare or the environment and is:

21 a) a substance that is defined as a hazardous
22 substance by Section 101(14) of the federal Comprehen-
23 sive Environmental Response, Compensation, and
24 Liability Act (CERCLA), 42 U.S.C. 9601(14), as amended;

25 b) a substance identified by the administrator of

1 the United States Environmental Protection Agency as a
2 hazardous substance pursuant to Section 102 of CERCLA,
3 42 U.S.C. 9602, as amended;

4 c) a substance that is defined as a hazardous
5 waste pursuant to Section 1004(5) of the Resource
6 Conservation and Recovery Act of 1976, 42 U.S.C.
7 6903(5), as amended, including all substances listed or
8 identified in 40 CFR 261; or

9 d) any petroleum product.

10 K. "NCP" means the National Oil and Hazardous Substances
11 Pollution Contingency Plan, 40 CFR, Part 300.

12 L. "Project Coordinator" shall mean the individual or
13 individuals appointed as the State's Project Coordinator(s) by
14 DHES, whose duties are described in Section XV of this Consent
15 Order.

16 M. (the) "Parties" collectively, shall mean the State of
17 Montana, acting by and through DHES, and the ARCO Coal Company.

18 N. "Release" means any spilling, leaking, pumping,
19 pouring, emitting, emptying, discharging, injecting, escaping,
20 leaching, dumping or disposing of any Hazardous or Deleterious
21 Substances into the environment.

22 O. "Respondent" shall mean the Atlantic Richfield Company,
23 a Delaware corporation, acting through its division the ARCO
24 Coal Company. The term "Respondent" shall include ARCO's
25 successors and assigns and all persons acting with or through

1 ARCO's authority and in ARCO's behalf, including ARCO's
2 officers, directors, principals, employees, and agents, in their
3 respective capacities where such persons otherwise meet the
4 definitions of "owners" and "operators" under CECRA.

5 P. "Supplemental Work Plan" shall mean any Work Plan to be
6 performed under the Additional Work Section, Section XI.
7 Supplemental Work Plan(s) shall become attached and incorporated
8 into this Consent Order.

9 Q. (the) "Work" shall mean all investigations, sampling,
10 and other mitigative actions prescribed by this Consent Order,
11 including any Work Plans, and any schedules or plans established
12 by the terms of this Consent Order.

13 R. "Work Plan" means the plan to perform the Work develop-
14 ed jointly by the Respondent and DHES, which is attached hereto
15 and incorporated herein as Attachment 1 to this Consent Order.

16
17 III.

18 FINDINGS OF FACT

19 The State of Montana, acting by and through DHES, has made
20 the following Findings of Fact concerning the Montana Pole site:

21 A. Respondent ARCO is a corporation currently organized
22 under the laws of the State of Delaware, with its corporate
23 headquarters in Los Angeles, California. Respondent ARCO does
24 business in the State of Montana. ARCO was the record owner of
25 portions of the land upon which the Facility is situated from

1 1910 to 1958. During a portion this time, from 1946 to 1958,
2 Respondent leased said property to Torger Oaas and the Montana
3 Pole and Treating Plant and subsequently sold said property to
4 Montana Pole and Treating Plant.

5 B. Torger and Martha Oaas, residing on Greenwood Avenue,
6 owned and operated the Montana Pole and Treating Plant from 1946
7 to May 17, 1984. The Oaases were in control of, and had
8 responsibility for, the property during operation of the
9 Facility.

10 C. The Montana Pole and Treating Plant is located at 220
11 Greenwood Avenue in Butte, Silver Bow County, Montana, in the
12 southern 1/2 of Section 24 and the SE 1/4 of Section 23, T3N,
13 R8W. The Facility includes approximately 45 acres. A map of
14 the site is attached as Attachment 5.

15 D. The Facility includes associated real property,
16 remaining foundations, drainage channels, tanks and storage
17 barns. It includes all soils, surface water and ground water at
18 or adjacent to the Facility where a Hazardous or Deleterious
19 Substance associated with the operations of the Montana Pole and
20 Treating Plant has been Released, deposited, stored, Disposed
21 of, placed or otherwise come to be located.

22 E. Respondent ARCO owned a portion of the real property
23 on which the Facility is located during the first twelve (12)
24 years of Facility operation. During that time, hazardous
25 substances were Disposed of on site in such a way that they were

The first part of the report deals with the general situation of the country and the progress of the work during the year. It is followed by a detailed account of the various projects and the results achieved. The report concludes with a summary of the work done and the plans for the future.

The second part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The third part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The fourth part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The fifth part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

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The seventh part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The eighth part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The ninth part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

The tenth part of the report contains a list of the names of the persons who have been engaged in the work during the year. It also gives a brief description of the work done by each of them.

1 Released into the environment.

2 F. Bank of Montana Butte received a deed in lieu of
3 foreclosure to a portion of the Facility on May 17, 1984.

4 G. Surface soils in the area where the Facility was
5 located are visibly contaminated. In addition, approximately
6 ten thousand (10,000) cubic yards of soil and sludge were
7 excavated, bagged and stored in pole barns on Facility property
8 by EPA as part of a removal action conducted in 1985.

9 H. The 1985 removal action conducted by EPA consisted of
10 the installation of wells adjacent to Silver Bow Creek to
11 intercept contaminated ground water prior to its entering Silver
12 Bow Creek. Floating product is removed from the extracted
13 ground water through an oil/water separator and the remaining
14 ground water is reinjected on site through infiltration
15 galleries. The State of Montana did not participate in the
16 design or installation of the ground water system. EPA operated
17 the system until September, 1988 when the State took over its
18 operation. The State has not modified the design of the system
19 since it assumed responsibility for its operation.

20 I. A fire at the facility in May, 1969 caused a heavy fuel
21 oil storage tank to rupture, causing the release of an unknown
22 quantity of diesel fuel, pentachlorophenol (PCP) and creosote.
23 Significant spillage from a vat and both retorts was reported.

24 J. Ground water under the Facility is contaminated with
25 pentachlorophenol, polynuclear aromatic hydrocarbons and diesel

1 fuel constituents. Floating product is present at the water
2 table in some monitoring wells.

3 K. Oil seeps are visible along the banks of Silver Bow
4 Creek. Surface water samples from the creek showed
5 concentrations of pentachlorophenol and diesel fuel.

6 L. The oil recovery system designed to intercept oily
7 product at the water table before it contaminated Silver Bow
8 Creek recovered approximately six thousand (6,000) gallons of
9 product between November, 1986 and December, 1988. This product
10 is stored in tanks on Facility property.

11 M. Pentachlorophenol and creosote are Hazardous or
12 Deleterious Substances as defined by MCA § 75-10-701(6). Sludge
13 and tank bottoms are listed K001 RCRA wastes pursuant to 40 CFR
14 261.32.

15 N. Dioxins and furans are known contaminants of pen-
16 tachlorophenol and have been identified in samples from the
17 Facility. These constituents are Hazardous or Deleterious
18 Substances as defined by MCA § 75-10-701(6).

19 O. Petroleum products are a Hazardous or Deleterious
20 Substance as defined by Section 75-10-701(6), MCA.

21 P. Polychlorinated Biphenyls (PCBs) are defined as a
22 Hazardous or Deleterious substance pursuant to MCA § 75-10-
23 701(6).

24 Q. Pentachlorophenol (PCP) is a Hazardous or Deleterious
25 Substance that can cause damage to the human liver, kidney,

1 nervous system, and immune system with chronic exposure. PCP
2 has been demonstrated to cause cancer in animals.

3 R. Creosote is a Hazardous or Deleterious Substance as
4 defined by MCA § 75-10-701(6) and contains polynuclear aromatic
5 hydrocarbons (PAH) which are Hazardous or Deleterious Substances
6 as defined by MCA § 75-10-701(6). Some PAHs are known
7 carcinogens.

8 S. Diesel fuel contains toluene, xylene, benzene, and
9 ethylbenzene, which are considered Hazardous or Deleterious
10 Substances. Benzene is considered a human carcinogen.

11 T. Actual and potential routes of exposure to PCP, dioxin,
12 PAHs, diesel fuel constituents, PCBs, dioxin, and other
13 Hazardous or Deleterious Substances include direct human or
14 animal contact through ingestion or dermal absorption of soil,
15 sediment, surface water or ground water, and inhalation of the
16 Hazardous or Deleterious Substances in air.

17 U. Actual and potential routes of migration of Hazardous
18 and Deleterious Substances include migration to ground water,
19 surface water and air.

21 IV.

22 CONCLUSIONS OF LAW

23 Based on the preceding Findings of Fact and the
24 administrative record, the State of Montana, acting by and
25 through DHES and in consultation with EPA, has made the

1 following Conclusions of Law:

2 A. Respondent is a "Person" as that term is defined by
3 MCA § 1-1-201(1)(b) and 75-10-701(9).

4 B. The Montana Pole and Treating Plant and associated
5 buildings, and all real property, including surface and ground
6 water, where Hazardous or Deleterious Substances originating
7 from the Montana Pole and Treating Plant have come to be
8 located, is a "Facility" as that term is defined in MCA § 75-
9 10-701(4)(a) or (b).

10 C. ARCO owned or operated the Facility or property at
11 the time of disposal of a Hazardous or Deleterious Substance as
12 provided in MCA § 75-10-715(1)(b).

13 D. Bank of Montana Butte was and is an owner or operator
14 of the Facility at the time of a Release of a Hazardous or
15 Deleterious Substance, as provided in MCA § 75-10-715 (1)(b).

16 E. The Respondent is, and is hereby notified that it is
17 found to be a liable Person under MCA Section 75-10-715(1).

18 F. Pentachlorophenol, PAHs, PCBs, creosote and petroleum
19 products are Hazardous or Deleterious Substances, as those terms
20 are defined in MCA § 75-10-701(6).

21 G. There have been Releases of Hazardous or Deleterious
22 Substances at the Facility, and there exists a substantial
23 threat of continued and future Releases of Hazardous or Deleter-
24 ious Substances at the Facility that DHES has reason to believe
25 may present an imminent and substantial endangerment to the

1 public health, welfare, or safety or the environment.

2 H. The information and remedial action required by this
3 Consent Order is necessary and appropriate to identify the
4 existence, nature, origin, and extent of the Release or the
5 threat of Release and the extent and imminence of the danger to
6 public health, welfare, safety, or the environment.

7 I. The Bank accepted a deed in lieu of foreclosure for
8 part of the Facility from the Montana Pole and Treating Plant on
9 May 17, 1984. The offer and acceptance of this deed served to
10 transfer legal title to part of the Facility to the Bank.
11 Though the Bank did not record this deed, the transfer qualified
12 as a legal transfer. Therefore, the Bank currently holds title
13 to the property.

14
15 V.

16 DETERMINATIONS

17 A. Based on the Findings of Fact and Conclusions of Law
18 set forth above, the State of Montana, acting by and through
19 DHES, and in consultation with EPA, has determined that the
20 actions required by and undertaken pursuant to this Consent
21 Order are necessary to protect the public health and welfare and
22 environment, are in the public interest, are consistent with the
23 NCP and State requirements, and are appropriate remedial actions
24 to contain, remove and abate the past Release of Hazardous and
25 Deleterious Substances and presently continuing Releases and

The first part of the paper discusses the importance of the study and the objectives of the research. It then proceeds to a literature review, where the author examines previous studies on the topic. The methodology section follows, detailing the research design and data collection methods. The results section presents the findings of the study, and the conclusion summarizes the main points and offers suggestions for future research.

The second part of the paper focuses on the analysis of the data. It includes a detailed discussion of the statistical methods used and the interpretation of the results. The author also addresses the limitations of the study and provides a comprehensive conclusion. The final section discusses the implications of the findings for practice and policy.

1 threatened Releases of Hazardous or Deleterious Substances, into
2 the environment at and from the Facility.

3 B. The Respondent is qualified to perform the actions set
4 forth in this Consent Order properly and expeditiously.

5
6 VI.

7 TERMS AND CONDITIONS OF CONSENT

8 A. In entering into this Consent Order, the Respondent
9 and the State of Montana agree that the Respondent will conduct
10 a Remedial Investigation (RI) and Feasibility Study (FS) for the
11 purpose of:

12 1. evaluating the nature and extent of contamination
13 and impacts on the public health, welfare, safety or
14 environment due to the Release of Hazardous or Deleterious
15 Substances at the Facility in accordance with the Work Plan
16 and Supplemental Work Plans; and

17 2. identifying and evaluating alternatives for
18 remediating contamination caused by the Release of
19 Hazardous or Deleterious Substances at the Facility in
20 accordance with the Work Plan and Supplemental Work Plans.

21 B. The Parties agree and acknowledge that the development
22 and performance of a Remedial Investigation (RI) and Feasibility
23 Study (FS) will be conducted through the retention and direction
24 of Contractors, in accordance with sound scientific, engineering
25 and construction practices and shall be consistent with all

1 applicable federal and state laws and regulations. The
2 Respondent has provided the State with information concerning
3 the technical qualifications of the persons and organizations
4 who have been designated by the Respondent to conduct the RI/FS
5 activities required by this Consent Order. The State has
6 determined that Respondent's Contractors are qualified to
7 undertake the performance of the RI/FS. For any change by the
8 Respondent in the primary engineering and/or consulting firm or
9 its principal person in charge, the Respondent shall reaffirm
10 this ability to carry out the task by notifying the State in
11 writing of the name(s) of the engineering and/or consulting
12 firm(s) who will be responsible for carrying out the Work under
13 this Consent Order, and the principal person in charge of
14 conducting the Work for each such firm to be used in carrying
15 out such Work.

16 C. Respondent further completely and voluntarily waives
17 its rights to, and agrees not to:

- 18 1. appeal the issuance of this Consent Order;
- 19 2. challenge the jurisdiction (or the essential facts
20 which create jurisdiction) or authority of the State or
21 DHES to enforce this Consent Order;
- 22 3. contest the validity or enforceability of any and
23 all provisions, terms, and conditions of this Consent Order
24 including the Work Plan and any Supplemental Work Plans
25 adopted pursuant hereto, except as provided for by

1 paragraph I of Section XX.

2 D. Subject to the provisions of paragraph C of this
3 Section VI, nothing in this Consent Order shall be construed as
4 an admission of liability by Respondent nor as a limitation,
5 restriction or waiver of any arguments or challenges which
6 Respondent may have regarding the proper interpretation or
7 construction of the provisions, terms and conditions of this
8 Consent Order and attachments hereto.

9 E. Moreover, Respondent's agreement to comply with the
10 provisions, terms and conditions of this Consent Order does not
11 constitute an admission or acknowledgment of the facts asserted
12 or implied herein. This Consent Order shall not operate as an
13 admission by Respondent as to any factual assertion or legal
14 conclusions outside of the context of proceedings to interpret
15 or enforce this Consent Order. Respondent specifically does not
16 admit or acknowledge the Findings of Fact or Conclusions of Law
17 contained in Sections III and IV above, except to the limited
18 extent noted in Subsection C, above.

19
20 VII.

21 PARTIES BOUND

22 A. All Parties are bound by the terms of this Consent
23 Order. Respondent agrees that no change in ownership or
24 corporate status shall in any way alter the status or
25 responsibility of the Respondent under this Consent Order.

1 Respondent shall be responsible for carrying out all actions
2 required of Respondent by the terms and conditions of this
3 Consent Order. Respondent shall be responsible for insuring
4 that all Contractors, consultants, firms and other Persons or
5 entities acting on behalf of Respondent with respect to matters
6 included herein, will comply with the terms of this Consent
7 Order.

8
9 VIII.

10 NOTICE

11 The State of Montana, acting by and through DHES, hereby
12 notifies Respondent that DHES has determined that Respondent is
13 a Person responsible for the Release(s) or threatened Release(s)
14 of Hazardous or Deleterious Substances from the Facility.
15 Moreover, Respondent is hereby notified by DHES that the Work
16 required by this Consent Order, the attached Work Plan and any
17 Supplemental Work Plans is the "appropriate remedial action"
18 with regard to the Releases or threatened Releases at the
19 Facility. Respondent is hereby notified that it may be required
20 to reimburse the Fund for the costs of remedial actions,
21 including enforcement actions, litigation costs, attorneys' fees
22 and expert witness fees, taken or incurred by DHES either to
23 implement itself, or to compel Respondent to implement an ap-
24 propriate remedial action following its failure or refusal to do
25 so, and the State may recover all costs incurred by the State in

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the specific results of the work.

2. The second part of the report deals with the specific results of the work. It is divided into three main sections: the first section deals with the results of the work in the field of agriculture, the second section deals with the results of the work in the field of industry, and the third section deals with the results of the work in the field of commerce.

3. The third part of the report deals with the financial results of the work. It is divided into two main sections: the first section deals with the income of the work, and the second section deals with the expenditure of the work.

4. The fourth part of the report deals with the general conclusions of the work. It is divided into two main sections: the first section deals with the general conclusions of the work, and the second section deals with the specific conclusions of the work.

5. The fifth part of the report deals with the general recommendations of the work. It is divided into two main sections: the first section deals with the general recommendations of the work, and the second section deals with the specific recommendations of the work.

1 connection therewith, including any punitive damages as set
2 forth in MCA § 75-10-715(3).

3
4 IX.

5 ORDER

6 NOW, THEREFORE, RESPONDENT AGREES, AND DHES HEREBY ORDERS,
7 pursuant to MCA §§ 75-10-711 and 75-10-715, Respondent to fully
8 and timely comply with all of the terms, conditions and
9 requirements of this Consent Order.

10
11 X.

12 DEVELOPMENT AND EXECUTION OF WORK PLAN

13 A. Respondent is ordered and agrees to conduct an RI/FS
14 for the Facility pursuant to the terms of this Consent Order.
15 The Respondent shall conduct the RI/FS in accordance with
16 CERCLA, the National Contingency Plan (NCP), applicable EPA
17 RI/FS guidance (identified in Attachment 3, attached and
18 incorporated herein), and applicable state law and regulation
19 (attached and incorporated herein as Attachment 4). The
20 Respondent shall conduct the RI/FS in accordance with the
21 attached Montana Pole RI/FS Work Plan. The attached Work Plan
22 is hereby incorporated into this Consent Order as an enforceable
23 part hereof (Attachment 1). The Respondent shall also conduct
24 the RI/FS in accordance with the specific activities and
25 schedules for conducting RI/FS work set forth in the attached

1 schedule, Attachment 2. In the event of any inconsistency
2 between the terms and conditions of this Consent Order, without
3 reference to its attachments and appendices, and those contained
4 in the Work Plan, and associated schedules, and attachments, or
5 other documents incorporated herein, the terms and conditions of
6 this Consent Order without reference to the attachments and
7 appendices shall take precedence.

8 B. In the event that subsequent amendments to CERCLA, the
9 NCP, applicable EPA RI/FS guidance, or applicable state laws or
10 regulations are promulgated after the effective date of this
11 Consent Order which materially affect the rights or obligations
12 of either party with respect to the substantive nature of the
13 Work to be performed in the RI/FS, the State and the Respondent
14 agree to negotiate in good faith an amendment to this Consent
15 Order to provide for such changes.

16 C. The State, in consultation with EPA, shall prepare all
17 necessary draft and final endangerment assessments, public
18 health evaluations, and analyses of "Applicable or Relevant and
19 Appropriate" federal and state standards, requirements, criteria
20 and limitations (ARARs) required for the RI/FS work, and provide
21 them to the Respondent in a timely manner for incorporation into
22 the draft and final RI/FS reports as described below. The
23 Respondent may submit a preliminary scoping document addressing
24 endangerment assessment, public health evaluation, or ARARs
25 issues to the State no later than one hundred eighty (180)

(

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(

1 calendar Days after the effective date of this Consent Order.
2 The Respondent agrees that no formal State response to the
3 Respondent's documents is needed before draft State documents
4 are published for public comment. The State shall use its best
5 efforts to complete and deliver these reports to the Respondent
6 within the time periods projected for completion and delivery in
7 the RI/FS Work Plan. These projected time periods are estimates
8 and are not binding upon the State. The State shall notify the
9 Respondent as early as possible if the State intends to complete
10 and deliver the reports before the dates projected in the Work
11 Plan and Schedule, Attachments 1 and 2.

12 D. Respondent shall incorporate the endangerment
13 assessment(s), public health evaluation(s) and ARARs analysis
14 prepared by the State in the deliverables described in
15 paragraphs X.E through X.I below. Where Respondent disagrees
16 with all or portions of the endangerment assessment(s), public
17 health evaluation(s) or ARARs analysis prepared by the State,
18 such disagreement shall not be expressed in the referenced
19 deliverables. The Respondent shall provide any comments or
20 objections concerning such documents separately, but not later
21 than the public comment period described in Section XXIV. Any
22 comments received from the Respondent, complete with any
23 responses provided by the state or federal government, shall be
24 included in the administrative record.

25 E. Draft RI and Preliminary Draft RI/FS Reports: The

1 Respondent shall submit a draft RI report and a preliminary
2 draft RI/FS report to the State for review and comment as
3 provided in the Work Plan schedule. Upon receipt of the drafts,
4 the State shall prepare and transmit comments to the Respondent
5 concerning any necessary revisions to be made in the final draft
6 RI/FS report before it is made available for public comment.

7 F. Final Draft RI/FS Report: The Respondent shall revise
8 the draft RI and preliminary draft RI/FS reports to address the
9 State's comments and submit a final draft RI/FS report to the
10 State for review and approval. Within thirty (30) days
11 following receipt of the State's comments on the draft RI report
12 and again within thirty (30) days following receipt of the
13 State's comments on the preliminary draft RI/FS report, DHES
14 shall hold meetings with the Respondent to review the State's
15 comments. Within thirty (30) days of the meeting on the
16 preliminary draft RI/FS report, the Respondent shall submit the
17 final draft RI/FS report. If the State disapproves the final
18 draft RI/FS report, Respondent shall be notified in writing and
19 the basis of the disapproval shall be specified. The dispute
20 resolution procedures in Section XX shall apply to disputes
21 arising from the State's disapproval. Respondent may cure the
22 dispute and terminate the dispute resolution process by agreeing
23 to the State's changes to the final draft RI/FS report at any
24 time during the dispute resolution process.

25 If the State disapproves the final draft RI/FS report, the

1 State may complete the final draft RI/FS, and recover the costs
2 of such an effort pursuant to federal or state law, upon a
3 determination by the State, subsequent to the dispute resolution
4 process, that the RI/FS is not being conducted properly and that
5 the public interest can only be served by the State taking over
6 the RI/FS process. Such a decision shall be in writing and
7 shall be part of the administrative record.

8 G. The State may make the draft RI report available to the
9 public for review only, and shall make the final draft RI/FS
10 report available to the public for review and comment for at
11 least a thirty (30) day period.

12 H. Draft Final RI/FS Report: Following the public review
13 and comment period, the Respondent shall submit a draft final
14 RI/FS report to the State within thirty (30) days of receipt of
15 the State's directions for revision and completion. The
16 Respondent shall adequately address or incorporate the State's
17 comments and directions in the draft final RI/FS report.

18 I. Final RI/FS Report: The Respondent shall have thirty
19 (30) days after receipt of the State's comments on the draft
20 final RI/FS report to submit the final RI/FS report to the State
21 for review and approval. If the Respondent does not adequately
22 respond to State comments in the final RI/FS report, the State
23 may notify the Respondent in writing that the State disapproves
24 the final RI/FS report. The dispute resolution procedures in
25 Section XX, with the exception of the informal negotiation

1 requirement, shall apply to disputes arising from the State's
2 disapproval of the final RI/FS report based upon the failure of
3 the Respondent to adequately respond to or incorporate the
4 State's comments in the final RI/FS report.

5 Upon the conclusion of the dispute resolution process as
6 described in Section XX, the Respondent shall comply with the
7 decision that is rendered. Any failure on the part of
8 Respondent to comply may result in the State preparing the final
9 RI/FS. If the State completes the RI/FS pursuant to the
10 provisions in this Section, the Respondent shall deliver to the
11 State all records pertaining to the conduct of the RI/FS, except
12 those records claimed by Respondent to be exempt by law from
13 such disclosure, within twenty (20) Days of receipt of such
14 notification from the State.

15 The State may also choose to enforce the terms of this
16 Consent Order, and compel the Respondent to produce the final
17 RI/FS consistent with the comments of the State.

18 J. The State and the Respondent will meet on a quarterly
19 basis to discuss implementation of the Work Plan, including
20 sampling, data, and reports.

21 22 XI.

23 ADDITIONAL WORK

24 A. If additional investigations are determined by DHES to
25 be necessary, DHES shall prepare a supplemental scope of Work

1 and request in writing that the Respondent develop a
2 Supplemental Work Plan for the additional Work as soon as
3 possible and no later than thirty (30) Days after such
4 notification, and request in writing that the Respondent perform
5 the additional Work. The supplemental scope of Work shall
6 specify the basis and reasons for determining that additional
7 Work is necessary. Prior to delivery of a supplemental scope of
8 Work to the Respondent, the State shall provide the opportunity
9 for a scoping meeting to discuss the form and substance of the
10 Supplemental Work Plan. The Respondent shall respond in writing
11 to DHES's request for additional Work, and if Respondent agrees
12 to undertake the additional Work, a Supplemental Work Plan shall
13 be prepared by the Respondent and submitted to the State for
14 review and comment. The State shall provide one round of
15 comments to Respondent which will be incorporated into the
16 Supplemental Work Plan unless the dispute resolution process
17 found in Section XX is invoked. The Supplemental Work Plan
18 developed for that additional Work shall become incorporated
19 into this Consent Order.

20 B. If the Respondent does not agree to perform the
21 additional Work and/or does not prepare an acceptable
22 Supplemental Work Plan, it shall provide its rationale to DHES
23 in writing. The State shall respond in writing to the
24 Respondent's comments. If the State and Respondent cannot agree
25 on the additional Work within thirty (30) Days of Respondent's

(1)

(1)

(1)

1 receipt of the State's response, the dispute shall be subject
2 to the dispute resolution process in Section XX. The Respon-
3 dent hereby agrees to perform any additional Work within the
4 scope of the original Work Plan which is determined, pursuant
5 to the dispute resolution process, to be necessary. Any fail-
6 ure by the Respondent to perform additional Work within the
7 scope of the original Work Plan shall be deemed to be a viola-
8 tion of this Consent Order. Any failure by the Respondent to
9 perform additional Work outside the scope of the original Work
10 Plan shall not constitute a violation of this Consent Order.
11 For the purposes of this Section, "the scope of the original
12 Work Plan" shall mean the investigation of contamination asso-
13 ciated with the Facility, the approximate boundaries of which
14 are shown in Figures 2-7 of Volume I of the Work Plan (Attach-
15 ment 1), except that any investigation of organic contamina-
16 tion in Silver Bow Creek shall be limited to a distance down-
17 stream to the USGS gauging station located at the Interstate I
18 15/90 overpass. If organic contamination associated with the
19 Montana Pole site is found at this location, downstream inves-
20 tigation will be included as part of investigations associat-
21 ed with the Silver Bow Creek NPL site. If the Respondent does
22 not perform the additional Work required of it following the
23 conclusion of the dispute resolution process, it shall be sub-
24 ject to statutory penalties for each Day it fails to comply with
25 the requirements of this Consent Order. In addition, the

1 State reserves the right to conduct the RI/FS activities
2 described in the supplemental scope of Work and/or pursue any
3 other actions authorized by applicable state or federal law.

4 C. Respondent agrees that if contaminants are detected
5 in the deep well to be installed pursuant to the Work Plan,
6 an additional two deep wells will be installed and sampled
7 without resort to the additional Work procedures described in
8 paragraph XI.A. The locations for these two wells will be
9 determined by the State following a meeting with the Respon-
10 dent to discuss the appropriate well locations.

11 XII.

12 SITE ACCESS AND SAMPLING

13 A. Respondent agrees to permit the State and its autho-
14 rized representatives to have unrestricted access to portions
15 of the Facility that may be owned or controlled by Respondent
16 which are either impacted by Releases, or utilized to conduct
17 any activities required by this Consent Order. Such grant of
18 access shall be for the purpose of conducting, overseeing and
19 inspecting any and all activities which have been or are being
20 conducted or overseeing and inspecting conditions which are
21 addressed under or impacted by the activities required to be
22 undertaken pursuant to this Consent Order. Nothing herein
23 shall limit or restrict any statutory inspection, site access,
24 or sampling authorities vested in DHES by applicable federal
25 or state law.

1 B. The Respondent hereby consents to observation by DHES
2 representatives at any time during the performance of Work
3 required under, performed in connection with, or undertaken in
4 furtherance of the purposes of this Consent Order. The Respon-
5 dent consents to DHES taking samples or split samples on any
6 property owned or controlled by Respondent which is part of the
7 Facility at any time at DHES's discretion.

8 C. The Respondent shall notify the State not less than
9 seven (7) days in advance of any sample collection activity to
10 be conducted by the Respondent or its representatives at the
11 Facility. Upon the request of the State, the Respondent shall
12 provide split or duplicate samples to the State of any samples
13 collected by or on behalf of the Respondent, provided that a
14 sufficient quantity of materials to be sampled are available on
15 the day of sampling. The procedures for collecting such split
16 or duplicative samples will be the procedures set forth in the
17 Quality Assurance Project Plan (QAPP) for the Montana Pole and
18 Treating Plant Site, set forth as Attachment 6.

19 D. To the extent access to property owned by third Parties
20 is required in order for the Respondent to carry out the
21 requirements of this Order, Respondent agrees to and shall use
22 its best efforts to obtain access for itself and DHES. Any
23 agreement must allow Respondent and DHES to sample or monitor
24 environmental media, including the right to split samples, on
25 property owned by third parties pursuant to the requirements of

1 the Consent Order and attached Work Plan. The State shall,
2 consistent with its authority under MCA § 75-10-707, obtain
3 access for the Respondent if the Respondent provides
4 documentation to DHES demonstrating that it has used its best
5 efforts to obtain access on its own and failed to obtain access.
6 The Respondent agrees that it will reimburse the State for all
7 expenses not inconsistent with the NCP which the State incurs in
8 gaining access for the Respondent, at the request of the
9 Respondent, and will indemnify the State as provided in Section
10 XXV of this Consent Order.

11 E. When working on property owned by third parties, the
12 Respondent shall provide the opportunity for the third party to
13 request and obtain a split sample. The Respondent shall
14 document that such an opportunity was provided.

15 F. The State shall notify the Respondent, orally or in
16 writing, not less than seven (7) calendar Days in advance of any
17 sample collection activity by or on behalf of the State. Upon
18 the request of the Respondent, the State shall provide split or
19 duplicate samples to the Respondent of any samples collected by
20 or on behalf of the State at or in the vicinity of the property
21 which is the subject of the Work Plans, provided that a
22 sufficient quantity of the materials to be sampled is available
23 on the Day of sampling. The procedures for collecting such
24 split or duplicative samples will be the procedures set forth in
25 the Quality Assurance Project Plan (QAPP) for the Montana Pole

1 and Treating Plant site, set forth as Attachment 6.

2
3 XIII.

4 COMPLIANCE WITH OTHER LAWS

5 All actions carried out by the Respondent pursuant to this
6 Consent Order shall be done in full compliance with all ap-
7 plicable federal, state and local laws and regulations. The
8 Respondent shall be responsible for obtaining all federal, state
9 or local permits which are necessary for the performance of any
10 Work hereunder. Pursuant to the State's authority under MCA §
11 75-10-721(3), the State agrees to exempt all remedial actions
12 conducted entirely on site pursuant to this Consent Order from
13 State and local administrative or procedural permit
14 requirements, if necessary to complete the requirements of this
15 Consent Order in a timely fashion.

16
17 XIV.

18 QUALITY ASSURANCE/QUALITY CONTROL

19 A. The Respondent shall comply with all approved quality
20 assurance, quality control, and chain of custody procedures and
21 requirements as they pertain to all sampling as set forth in the
22 Quality Assurance Project Plan (QAPP) and the Laboratory
23 Analytical Protocol (LAP) established under this Consent Order.

24 B.. Respondent, the State and their respective contractors
25 and consultants shall cooperate and make available to each other

The first part of the paper discusses the importance of the study of the history of the English language. It is noted that the English language has a long and rich history, and that the study of its development is essential for a full understanding of the language. The paper then goes on to discuss the various factors that have influenced the development of the English language, including the influence of other languages, the influence of social and cultural changes, and the influence of technological advances.

The second part of the paper discusses the importance of the study of the history of the English language. It is noted that the English language has a long and rich history, and that the study of its development is essential for a full understanding of the language. The paper then goes on to discuss the various factors that have influenced the development of the English language, including the influence of other languages, the influence of social and cultural changes, and the influence of technological advances.

The third part of the paper discusses the importance of the study of the history of the English language. It is noted that the English language has a long and rich history, and that the study of its development is essential for a full understanding of the language. The paper then goes on to discuss the various factors that have influenced the development of the English language, including the influence of other languages, the influence of social and cultural changes, and the influence of technological advances.

The fourth part of the paper discusses the importance of the study of the history of the English language. It is noted that the English language has a long and rich history, and that the study of its development is essential for a full understanding of the language. The paper then goes on to discuss the various factors that have influenced the development of the English language, including the influence of other languages, the influence of social and cultural changes, and the influence of technological advances.

The fifth part of the paper discusses the importance of the study of the history of the English language. It is noted that the English language has a long and rich history, and that the study of its development is essential for a full understanding of the language. The paper then goes on to discuss the various factors that have influenced the development of the English language, including the influence of other languages, the influence of social and cultural changes, and the influence of technological advances.

1 in monthly data reports a summary of site activities including
2 the results of sampling and testing, and upon request other data
3 generated by any of them or on their behalf, including raw data,
4 field notes, data validation reports and any other relevant
5 information in their possession regarding the actions called for
6 by this Consent Order, except as exempt by law from such
7 disclosure. Monthly data reports shall include data received
8 during each calendar month and shall be due no later than the
9 15th day of the succeeding month.

10 C. In order to provide quality assurance and maintain
11 quality control with respect to all samples collected pursuant
12 to this Consent Order, the Respondent shall:

13 1. Arrange for access for DHES and its authorized
14 representatives, upon reasonable notice to Respondent and
15 during regular business hours, to any laboratories and
16 personnel utilized by the Respondent for analyses;

17 2. Ensure that all sampling and analyses are performed
18 according to the methods set forth in the Sampling and
19 Analysis Plans (SAPs) attached and incorporated herein as
20 Attachment 7, the QAPP and the LAP established under this
21 Consent Order;

22 3. Ensure that any laboratories utilized by the
23 Respondent for analyses prepare and maintain adequate
24 documentation of compliance with the requirements described
25 in XIV.C.2. (above) and that such documentation be made

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings of the research. The data shows a clear trend of increasing activity over time.

4. The fourth part of the document discusses the implications of the findings. It suggests that the results have significant implications for the field of study and may lead to further research in this area.

5. The fifth part of the document concludes the study. It summarizes the main findings and provides a final statement on the importance of the research.

1 available to DHES and the Respondent upon request;

2 4. Ensure that any laboratories utilized by the
3 Respondent for analyses participate in a quality as-
4 surance/quality control program equivalent to that which is
5 followed by EPA under CERCLA. As part of such a program,
6 and upon request by DHES, such laboratories shall perform
7 such analyses of samples provided by DHES as are necessary
8 to demonstrate the quality of each laboratory's analytical
9 data.

10 5. If Respondent utilizes a laboratory which
11 participates in EPA's Contract Laboratory Program,
12 paragraphs 1 and 4 of this Section XIV shall be
13 inapplicable.

14
15 XV.

16 PROJECT COORDINATORS AND REPORTING

17 A. On or before the effective date of this Consent Order,
18 the Respondent shall designate one or more Project Coordinators
19 and alternate Project Coordinators. The State Project Coor-
20 dinator will be Brian Antonioli, and the alternate Project
21 Coordinator will be Karen Zackheim. The Project Coordinator for
22 the Respondent will be Robert D. Montgomery. The alternate
23 Project Coordinator for the Respondent will be William R.
24 Williams. Each Project Coordinator shall be responsible for
25 overseeing the implementation of this Consent Order. To the

1 maximum extent practicable, communications between the
2 Respondent and the State, and all documents, reports, ap-
3 provals, and other correspondence concerning the activities
4 performed pursuant to or required by the terms and conditions of
5 this Consent Order, shall be directed through the Project
6 Coordinators. If the Project Coordinator is unavailable, such
7 information shall be directed through the alternate Project
8 Coordinator. During implementation of the Work Plans and any
9 supplemental Work Plans, the Project Coordinators shall,
10 whenever possible, attempt in good faith to resolve disputes
11 informally through discussion of the issues.

12 B. The State and the Respondent shall each have the right
13 to change their respective Project Coordinators. Such a change
14 shall be accomplished by notifying the other Party as soon as
15 possible after making the change.

16 C. The State Project Coordinator shall have, and may
17 exercise, the authority vested in DHES by MCA §§ 75-5-621 and
18 75-10-712. In addition, he shall have the authority to
19 immediately halt any activities at the Facility which are being
20 or may be undertaken pursuant to this Consent Order, which
21 violate, threaten to violate, or which cause or threaten to
22 cause, a public nuisance or a violation of any requirements of
23 applicable federal or state law, this Consent Order, or a Work
24 Plan or Supplemental Work Plan established under this Consent
25 Order.

1 D. When the State Project Coordinator takes action under
2 paragraph XV.C, the State Project Coordinator may orally direct
3 a substantive change not inconsistent with the NCP to the
4 requirements of the Work Plan. Such a change shall be followed
5 up in writing by the State within three (3) business days of the
6 oral direction. "Substantive change," for the purposes of this
7 paragraph, shall be defined as any change that contradicts the
8 written language in the Work Plan attached hereto, and any
9 Supplemental Work Plans, provided, however, that any substantive
10 change which substantially increases the cost to, or obligations
11 of, the Respondent, other than substantive changes to address
12 emergency conditions, shall be proposed as Additional Work under
13 Section XI of this Consent Order. Such direction shall be
14 subject to dispute resolution after receipt of written notice
15 specified above, unless covered under the conditions described
16 in Section XX.J. Once a final determination has been made
17 pursuant to the dispute resolution process described in this
18 Consent Order, the Parties agree to incorporate such change into
19 this Consent Order by written amendment. Any substantive change
20 ordered by the State Project Coordinator which affects the
21 Schedule of activities set forth in Attachment 2, shall be
22 treated as a Force Majeure event pursuant to Section XVI of this
23 Consent Order. If dispute resolution procedures are not
24 initiated within 10 business days of receipt by the Respondent
25 of the written notice referenced in paragraph XV.D above, the

1 written notice shall be incorporated into this Consent Order as
2 a modification and shall become a fully enforceable part
3 thereof.

4 E. The absence of the State Project Coordinator from the
5 Facility shall not be cause for stoppage of the Work to be
6 performed pursuant to this Consent Order.

7 F. One copy of all plans, reports, notices and other Work
8 products required under the terms of this Consent Order shall be
9 sent by certified mail, return receipt requested, or equivalent
10 service to each of the following:

11 Brian Antonioli
12 Solid and Hazardous Waste Bureau
13 Montana Department of Health and
14 Environmental Sciences
15 Cogswell Building, Room B201
16 Helena, MT 59620

17 Thomas L. Eggert, Esq.
18 Special Assistant Attorney General
19 Legal Division
20 Montana Department of Health and
21 Environmental Sciences
22 Cogswell Building, Room C216
23 Helena, MT 59620

24 Michael Bishop
25 U.S. Environmental Protection Agency
Region VIII
Federal Building
301 South Park
Helena, MT 59626-0096

26 G. Except for initial oral notices specified in Sections
27 XV.D., XVI.B. and XX.A., all notices given pursuant to this
28 Consent Order shall be given in writing.

29 H. Copies of all plans, reports, notices and other Work

1 products to be given to ARCO shall be sent to the following
2 address:

3 Robert D. Montgomery
4 ARCO Coal Company
5 307 East Park Avenue, Suite 301
6 Anaconda, MT 59711

7 with copies to:

8 Jeffrey H. Desautels, Esq.
9 ARCO Coal Company
10 555 Seventeenth Street, Suite 2000
11 Denver, CO 80202

12 and

13 Linda L. Rockwood, Esq.
14 Parcel, Mauro, Hultin & Spaanstra, P.C.
15 1801 California, Suite 3600
16 Denver, CO 80202

17 XVI.

18 FORCE MAJEURE

19 A. Failure of the Respondent to comply with the require-
20 ments of this Consent Order, including the Work Plan and
21 Supplemental Work Plans shall be excused only to the extent such
22 delay or failure of performance is caused by reasonably
23 unforeseeable occurrence(s) beyond the control of the Respondent
24 and which the Respondent could not have prevented, or avoided
25 by the exercise of due diligence, (hereinafter: "Force
Majeure"). Force Majeure shall include but not be limited to:
Acts of God, war, revolution, riots, strikes, fires, or floods.
Such circumstances also include, but are not limited to, delays
or failures of governmental agencies in issuing necessary
permits or approvals, provided such permits are required and the

1 Respondent has timely submitted complete applications and
2 provided all required information. Such circumstances may also
3 include delays in obtaining access to property of third Parties,
4 provided that the Respondent has made a good faith and timely
5 effort to secure such access, and provided that the Respondent
6 has requested assistance from the State in a timely manner.
7 Finally, Force Majeure may include delays, beyond time periods
8 estimated in the Work Plan, by the State in providing comments
9 or other key documents, provided that the delay shortens the
10 period allowed for the Respondent to comply with a deadline.
11 Such circumstances shall not include increased cost of perfor-
12 mance, changed economic circumstances, or normal inclement
13 weather. The Respondent shall bear the burden of proving by a
14 preponderance of the evidence that any failure to comply with
15 the requirements of this Consent Order, the Work Plan or a
16 Supplemental Work Plan is due to Force Majeure.

17 B. The Respondent shall notify the State's Project
18 Coordinator(s) orally, within 48 hours of the time Respondent
19 learns of the circumstances, and shall, within seven (7) Days of
20 oral notification to the State, notify the State in writing of
21 the anticipated length and cause of delay, the measures taken
22 and to be taken to prevent or minimize the delay, and the
23 timetable by which the Respondent intends to implement those
24 measures. Oral notification to the State must occur in no event
25 more than 48 hours after Respondent or Respondent's contrac-

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present. The author then proceeds to a detailed examination of the various factors which have shaped the development of the United States. These factors include the influence of the European settlers, the role of the Native Americans, and the impact of the American Revolution. The author also discusses the role of the federal government in the development of the country, and the influence of the various states. The paper concludes by emphasizing the importance of a continued study of the history of the United States, and the need for a more complete understanding of the past in order to better understand the present.

1 tor(s) become aware of the occurrence or event causing the delay
2 or failure in whole or in part. Oral notification shall be to
3 the State Project Coordinator, Brian Antonioli, or his designee,
4 at (406) 444-2821. After business hours, oral notification
5 shall be to Brian Antonioli at (406) 442-6130, Karen Zackheim at
6 (406) 449-6366 or Vic Andersen at (406) 458-5118. Failure to
7 timely make the oral and written notifications to the State
8 required by this paragraph B of any event for which Force
9 Majeure is claimed shall waive the defense otherwise provided by
10 this paragraph, but only for the event for which notice has not
11 been made.

12 C. If the Respondent demonstrates to the State that the
13 delay has been or will be caused by circumstances beyond the
14 reasonable control of the Respondent and that it exercised due
15 diligence to prevent the delay, the time for performance for
16 that element of the Work Plan or Supplemental Work Plan shall be
17 extended for a period equal to the delay. The extension of time
18 may include any reasonable additional time necessary, not to
19 exceed 15 Days, to mobilize manpower or machinery after the
20 elimination of the Force Majeure event. This shall be ac-
21 complished through written notice or through an amendment to
22 this Consent Order, as appropriate. Such an extension does not
23 alter the schedule for performance or completion of other tasks
24 required by the Work Plan or Supplemental Work Plans unless
25 these are specifically altered by amendment of the Consent

1 Order, or unless the Work on those other tasks depends on
2 continued Work on the tasks delayed by the Force Majeure event.
3 In the event further Work depends on the Work delayed by the
4 Force Majeure event, the time for performance of the further
5 Work shall be extended only for a period equal to that of the
6 delay caused by the Force Majeure event and any reasonable
7 additional time necessary, not to exceed fifteen (15) Days, to
8 mobilize manpower or machinery.

9 D. In the event that the State and Respondent cannot agree
10 that any delay or failure has been or will be caused by cir-
11 cumstances beyond the reasonable control of the Respondent, or
12 if there is no agreement on the length of the extension, the
13 dispute shall be resolved in accordance with the provisions of
14 Section XX of this Consent Order. If Respondent does not
15 prevail in the dispute resolution pursuant to the dispute
16 resolution process, any stipulated penalties which would apply
17 by operation of Section XIX of this Consent Order shall apply
18 during the term of the dispute resolution procedures, as
19 provided for in Section XX.

20 E. If the late receipt of State comments or documents
21 results in Respondent's inability to comply with a deadline due
22 to inclement weather conditions which substantially adversely
23 affect the specific activity to be performed, the State and the
24 Respondent agree to negotiate a schedule extension.

XVII.

RECORD PRESERVATION AND EXCHANGE

A. The Respondent agrees that it shall preserve and make available to DHES, during the pendency of this Consent Order and for a period of six (6) years from the date of termination of this Consent Order, all records or documents in its possession or in the possession of its employees, agents, accountants, contractors, or attorneys that relate to the Work performed at the site pursuant to this Consent Order. Upon written request by the State, Respondent shall within twenty (20) Days make all such documents not exempt from disclosure by law available to the State. At the end of this six (6) year period, the Respondent may destroy any such records, but only after notifying DHES at least thirty (30) Days in advance and allowing DHES to inspect and copy any such records. At any time before the end of the six (6) year period, Respondent may discharge its obligations under this Section with respect to documents not exempt from disclosure by law by notifying the State in writing and providing the State with originals, if available, or unaltered reproductions of copies in possession of Respondent of all such reports and documents not already provided to the State and not exempt from disclosure by law. If unaltered reproductions of copies are provided, the custodian of the records shall certify that to the best of the custodian's knowledge, the copies were made contemporaneously with the

1 original and that the copies are an accurate reproduction of the
2 original. Thereafter, the records may be destroyed except that
3 the Respondent must preserve all records and documents which the
4 Respondent claims are exempt by law from disclosure for the
5 entire six (6) year period referenced above.

6 B. All records, documents, raw data, and other information
7 (including, but not limited to, field notes, daily ledgers,
8 diaries, and memoranda), not otherwise exempt from disclosure by
9 law, which are within the custody or control of Respondent or
10 its Contractors relating to performance of any of the activities
11 required by or undertaken pursuant to this Consent Order or
12 plans established thereunder shall be available to DHES for
13 inspection and copying upon notice to the Respondent as provided
14 for herein.

15
16 XVIII.

17 ADMISSIBILITY OF DATA

18 A. Except for objections as to relevance, the Parties
19 hereby stipulate to and waive any objection to the admissibility
20 into evidence of the results of any final data generated by the
21 Respondent in the performance of the requirements of this
22 Consent Order. For purposes of this Section, the term "final
23 data generated" shall be interpreted to mean only analytical
24 data that have been verified and approved by the State, or
25 verified by the Respondent and approved by the State, pursuant

1 to the QAPP and the data assessment and data validation plans as
2 being in full compliance with the quality assurance/quality
3 control ("QA/QC") requirements of the QAPP, LAP, and SAPs in
4 effect at the time the samples were collected. Additionally,
5 except for objections as to relevance, the Parties stipulate to
6 and waive any objection to the admissibility into evidence of
7 final data generated and contained in, or referenced in, reports
8 generated by any of the Parties or their Contractors pursuant to
9 this Consent Order.

10 B. If the State determines that analytical data are still
11 usable in the RI/FS (and supporting documents), or in a natural
12 resource damage context, for certain specific purposes, and
13 QA/QC requirements that were in place at the time the data were
14 gathered were not completely satisfied, or no QA/QC requirements
15 existed, the State shall identify such data in a written report
16 which describes the acceptable uses for the data, including any
17 limitations on such uses and the reasons why they are still
18 usable. The State shall transmit the report to the Respondent
19 with a request that the Respondent stipulate to and waive any
20 objection as to the admissibility into evidence (with the
21 reservation described above) of the data if offered by the State
22 as evidence in any enforcement proceeding. The Respondent shall
23 respond in writing no later than thirty (30) days following
24 receipt of the report to each issue and data point discussed by
25 the State. The Respondent shall negotiate in good faith and, if

1 agreement is reached, enter into a written stipulation and
2 waiver concerning the data. If the State and the Respondent do
3 not agree to a written stipulation covering certain data, the
4 Respondent waives its rights to object to expenditures of funds
5 (either required of Respondent or made by the State) necessary
6 for the collection of new data to replace that which was not
7 stipulated to; however, Respondent reserves any objections it
8 may have as to the necessity or use of the data not stipulated
9 to or the new data.

10 C. The Respondent may list subject's report to the State
11 identifying data that does not fully comply with OAC
12 requirements, describing acceptable uses for the data,
13 describing the reasons why it is still usable, and proposing a
14 written stipulation and waiver of the right to raise evidentiary
15 objections in any further enforcement proceeding by the State.
16

17 XIX.

18 STIPULATED PENALTIES

19 A. In the event that the Respondent's completion of the
20 tasks set forth in this Section and called for in the Work Plan
21 is not timely according to the schedule in Attachment 2, and
22 such delay is not excused by operation of Section XVI (Force
23 Majeure), or if the Respondent violates the following provisions
24 of this Consent Order, DHEC may assess and Respondent shall pay,
25 by tendering to DHES within ten (10) Days of the Respondent's

1 receipt of a written demand from DHES for payment of such
2 penalties, the sum(s) set forth below as stipulated penalties
3 for each stipulated penalty event (i.e., violation, delay,
4 refusal or failure). Stipulated penalties may be assessed for
5 each Day during which such violation, delay, or failure occurs
6 or continues. The demand shall specify the events giving rise
7 to Respondent's asserted liability for stipulated penalties and
8 the amount of such penalties.

9 1. For each Day of delay of the delivery of the
10 draft and final sampling and analytical plans, the
11 technology screening document, the Alternatives Screening
12 Document (ASD report), the treatability study Work Plan,
13 the draft RI report, the preliminary draft RI/FS report,
14 the final draft RI/FS report, the draft final RI/FS
15 report, and the final RI/FS report:

	<u>Amount/Day</u>
1-14 Days	\$ 3,000.00
15-30 Days	6,000.00
31 or more Days	12,000.00

16 2. For failure to pay uncontested portion of
17 reimbursable costs on time as specified in Section XXI:

	<u>Amount/Day</u>
1-14 Days	\$ 1,000.00
15-30 Days	3,000.00
31 or more Days	6,000.00

18 3. For each instance of unintentional destruction
19 of a document(s) in violation of Section XVII (Respondent
20 shall bear the burden of establishing that any destruc-
21 tion was unintentional):

22 \$2,500 per instance
23
24
25

1 4. For each instance of willful destruction of a
2 document in violation of Section XVII, failure to provide access
3 under Section XII, or failure to comply with the agreement not
4 to contest jurisdiction in Section VI:

5 \$20,000 per instance

6 B. DHES hereby finds that the provisions of this Section
7 XIX are designed to protect the public health, welfare, safety
8 and environment by achieving a prompt, complete and efficient
9 assessment of the nature and extent of, and the development of,
10 a plan for remediation of environmental degradation that may be
11 present at the site. Stipulated penalties are also integral and
12 essential to DHES's desire that the provisions of this Consent
13 Order be, to the maximum extent achievable, self-executing and
14 self-enforcing. All stipulated penalties not specifically
15 rejected by the dispute resolution process shall be paid on or
16 before the tenth (10th) Day following final resolution of the
17 dispute pursuant to Section XX of this Consent Order.

18 C. DHES may, in its discretion, impose a lesser penalty
19 for minor violations. Any such decision to reduce stipulated
20 penalties otherwise due pursuant to Section XIX.A. of this
21 Consent Order shall be solely at DHES's discretion and shall not
22 be subject to dispute resolution.

23 D. Stipulated penalties shall begin to accrue as of the
24 date of receipt by Respondent of written notice from the State
25 specifying the violation of the Consent Order requirement and
specifying the applicable penalty provision. The check for

1 payment of the stipulated penalties shall be mailed within ten
2 (10) days of Respondent's receipt of a written demand for
3 payment. Payment of stipulated penalties pursuant to this
4 Section XIX to DHES shall be by check, made payable to the order
5 of "State of Montana, Department of Health and Environmental
6 Sciences" and tendered to:

7 Centralized Services Division
8 Department of Health and Environmental Sciences
9 Cogswell Building, Room C123
10 Helena, MT 59620

11 A copy of the transmittal letter and copy of the check shall be
12 sent to the legal division at the following address:

13 Thomas L. Eggert, Esq.
14 Department of Health and Environmental Sciences
15 Legal Division, Room C216
16 Cogswell Building
17 Helena, MT 59620

18 E. If Respondent fails or refuses to comply with the
19 requirements and schedules of this Consent Order, the State may
20 pursue any other remedy or sanction which may be available to
21 the State because of the Respondent's failure or refusal to
22 comply with any of the terms of this Consent Order, including an
23 action for statutory penalties or for injunctive relief to
24 enforce the terms of this Consent Order.

25 F. Delay caused by formal dispute resolution requested by
Respondent under Section XX in which DHES prevails shall not
constitute "a circumstance beyond the control of the Respondent"
for purposes of being excused from payment of stipulated
penalties under Section XVI (Force Majeure).

1 G. With respect to stipulated penalties, the State shall
2 have the burden of proving non-compliance, except as specified
3 in Section XIX.A.3., and the Respondent shall have the burden
4 of proving the occurrence of a Force Majeure event.

5
6 XX.

7 DISPUTE RESOLUTION

8 A. In the event of any dispute pertaining to any of the
9 requirements of this Consent Order, including the Work Plan and
10 any Supplemental Work Plans, the Parties shall initiate an
11 informal dispute resolution period not to exceed ten (10) Days.
12 During this time period, representatives of the State and the
13 Respondent shall meet informally to make a good faith attempt
14 to resolve the dispute. At the conclusion of the informal
15 dispute resolution process, DHES shall immediately notify the
16 Respondent orally of its decision. The conclusion of the
17 informal dispute resolution process shall be documented by DHES,
18 and a notice shall be sent to Respondent within three (3) days
19 of the documented conclusion. Any agreement between the Parties
20 resolving a dispute shall be in writing and made a part of the
21 administrative record. It is understood that neither the
22 Director of the Department of Health and Environmental Sciences
23 nor the Administrator of the Environmental Sciences Division
24 will be present at these meetings.

25 B. In the event the dispute cannot be resolved through

1 this informal process, the Respondent may submit, on or before
2 the tenth (10th) Day after conclusion of the informal dispute
3 resolution process, a notice describing the nature of the
4 dispute to the Administrator of the Environmental Sciences
5 Division. This notice shall include all arguments and
6 authority, both statutory and common law, and other facts and
7 conclusions upon which the Respondent relies in support of its
8 position.

9 C. Any dispute or argument in support of a dispute not
10 submitted to the Administrator of the Environmental Sciences
11 Division within this ten-Day period shall be waived.

12 D. Within ten (10) Days following receipt of the
13 aforementioned notice to the State, the Administrator of the
14 Environmental Sciences Division shall schedule and hold a
15 hearing addressing the subject matter of the dispute. The
16 Administrator of the Environmental Sciences Division or his duly
17 designated representative shall attempt to schedule the hearing
18 for a time which is convenient to the Parties. The
19 Administrator shall notify in writing all Parties of the time
20 and place of the hearing. This hearing shall take place before
21 the Administrator or his duly designated representative and
22 shall be transcribed or recorded. At this hearing, all Parties
23 may present their respective arguments and any evidence in
24 support of their position. The Administrator of the
25 Environmental Sciences Division or his duly designated

1 representative shall then consider all arguments and all
2 evidence submitted and shall render a written decision upon the
3 dispute within seven (7) Days of the hearing.

4 E. In the event the Respondent does not agree with the
5 decision of the Administrator, it may appeal, in writing within
6 five (5) Days of its receipt of the decision, to the Director
7 of the Department of Health and Environmental Sciences. At this
8 time, the Respondent can request and the Director may, at his
9 discretion, schedule a meeting with the Respondent and
10 representatives of the State of Montana, at which time both
11 Parties may make an oral presentation of their respective
12 positions. It is to be understood, however, that this meeting
13 is to be scheduled solely at the discretion of the Director and
14 nothing in this Section entitles the Respondent to such a
15 meeting as a matter of right. Only those arguments and posi-
16 tions originally presented at the hearing before the
17 Administrator will be considered at this appeal stage. The
18 Director shall render a written decision within seven (7) Days
19 on the appeal following receipt of the request from the
20 Respondent. In the event the Director decides to hold a
21 meeting as provided above, the period for rendering a written
22 decision may be extended for an additional seven (7) days;
23 however, no stipulated penalties shall accrue during that
24 period. The decision of the Director is final and shall be
25 made part of the administrative record.

1 F. In the event the Administrator or his duly designated
2 representative fails to render a written decision within the
3 time period stated in paragraph XX.D or the Director fails to
4 render a written decision within the time period stated in
5 paragraph XX.E, stipulated penalties shall be tolled for each
6 day that such written decision is delayed.

7 G. Any stipulated penalties which arise out of or are the
8 subject of the dispute resolution shall accrue during the
9 dispute resolution period, unless tolled by paragraph XX.E or

10 XX.F. In the event this process ends in favor of the
11 Respondent, no stipulated penalties shall be due for that
12 particular violation. In the event this process ends in favor
13 of the State, all penalties shall be immediately due and owing
14 and shall be paid by Respondent in accord with the procedures
15 set forth in paragraph XIX.D, unless either the Administrator
16 or the Director finds that the Respondent's position was
17 substantially justified. If it is found that the Respondent's
18 position was substantially justified or that the Respondent
19 acted in good faith in advancing an event as a Force Majeure,
20 then the Administrator or the Director, as appropriate, may
21 forgive part or all of the stipulated penalties incurred. Such
22 a decision shall be solely at the discretion of the
23 Administrator or Director.

24 H. In the event the dispute resolution process ends in
25 favor of the State, the Respondent understands and agrees to



1 reimburse the State for all costs incurred by the State because
2 of the utilization of this resolution process. These costs
3 shall include but are not limited to costs incurred by the State
4 through the utilization of its own employees, attorneys,
5 laboratories or scientific studies.

6 I. The Respondent may not challenge provisions of this
7 Consent Order to which it has already agreed by resorting to
8 these dispute resolution procedures, except that a good faith
9 dispute as to interpretation of the Consent Order shall be
10 subject to such procedures. Implementation of these dispute
11 resolution procedures shall not provide the basis for any
12 schedule extension for any activities required in this Consent
13 Order unless the Department of Health and Environmental Sciences
14 agrees in writing to a scheduled extension.

15 J. The Director of the Department of Health and
16 Environmental Sciences shall have authority to suspend these
17 dispute resolution procedures during any period in which an
18 immediate action is required to prevent an imminent and
19 substantial threat to public health, welfare or the environment.
20 In the event of such a suspension, any stipulated penalties
21 otherwise accruing shall be tolled until Respondent's receipt of
22 notification of resumption of the dispute resolution process.

XXI.

REIMBURSEMENT OF COSTS

A. The Respondent agrees to reimburse the State within forty-five (45) Days of receipt of an accounting which identifies all costs incurred by the Department of Health and Environmental Sciences and its contractor the Montana Bureau of Mines and Geology (hereafter DHES costs) prior to the effective date of this Consent Order. Such past costs include costs incurred in connection with the investigation of or response to Releases or threatened Releases from the Facility. The accounting will include all costs incurred under, or in connection with, the drafting, negotiation and execution of this Consent Order. The Respondent agrees to pay all DHES costs, excluding those provided by U.S. EPA pursuant to cooperative agreements covering the Montana Pole NPL Site. Past DHES costs shall not exceed twenty-three thousand dollars (\$23,000). Payment of this amount by Respondent shall constitute a full and final settlement by Respondent and the State of State response costs at the Montana Pole site arising under CECRA and CERCLA prior to the effective date of this Consent Order.

B. On or after the beginning of each calendar quarter (i.e., January 1, April 1, July 1 and October 1) beginning on the effective date of this Consent Order, the State shall submit an accounting, including all applicable documentation, to the Respondent covering all remedial action costs incurred by the

1. Definition of the problem

2. Statement of the objectives

3. Review of the literature

4. Methodology

5. Results and discussion

6. Conclusion

7. References

8. Appendix

9. Glossary

10. Index

11. Bibliography

12. Acknowledgements

13. Declaration of interest

14. Conflict of interest

15. Funding

16. Ethics approval

17. Patient consent

18. Data availability

19. Author contributions

20. Correspondence

21. Additional information

22. Supplementary material

23. References

24. Appendix

25. Glossary

26. Index

27. Bibliography

28. Acknowledgements

29. Declaration of interest

30. Conflict of interest

1 State in connection with, or arising out of, its response to
2 Releases or threatened Releases from the Facility. However, the
3 State agrees not to seek, solely on the basis of this Consent
4 Order, cost recovery for any action defined as a remedial action
5 by CERCLA Section 101(24), 42 U.S.C. § 9601(24). The Respondent
6 agrees to and shall reimburse the State for all activities and
7 oversight undertaken by the State or its Contractors which are
8 consistent with the scope of the State's role and
9 responsibilities under this Consent Order.

10 accounting shall itemize State costs which have not been covered
11 by funding provided by the EPA through a cooperative agreement
12 and shall include, at a minimum, the following information: the
13 names and titles of State employees and retained legal counsel,
14 date(s), time and other direct charges; indirect charges; and
15 State Contractor vouchers and/or invoices for Work performed for
16 State activities and oversight related to implementation of
17 this Consent Order, except for any privileged information
18 contained in such vouchers or invoices.

19 C. Within thirty (30) Days of receipt of documentation
20 from the State, the Respondent shall, subject to its right to
21 invoke the provisions in Paragraph E of this Section XII,
22 reimburse the State for all such costs which have not been
23 covered by funding provided by the EPA through a cooperative
24 agreement.

25 D. Payment to the State for its costs described in

1 paragraphs A and B shall be by check and shall include a
2 notation that the amount is a contribution to the Environmental
3 Quality Protection Fund. The check shall be made payable to
4 "State of Montana, Department of Health and Environmental
5 Sciences" and shall be tendered to: Centralized Services
6 Division, Montana Department of Health and Environmental
7 Sciences, Cogswell Building, Room C123, Helena, Montana 59620.
8 The contributions should be identified as being for the Montana
9 Pole site. Copies of all payments to the State shall be
10 provided at the time of such payment to: Thomas L. Eggert,
11 Esq., Montana Department of Health and Environmental Sciences,
12 Legal Division, Room C216, Cogswell Building, Helena, Montana
13 59620.

14 E. If the Respondent concludes that the State has made an
15 accounting error, has not included the documentation described
16 in paragraph B. above, or has included remedial action costs
17 that are not recoverable under this Consent Order, it may
18 contest payment by notifying the State of these conclusions,
19 together with the facts and arguments upon which Respondent
20 relies to support its conclusions, in writing within thirty (30)
21 Days of receipt of the accounting. Any objection to the State's
22 remedial action costs or supporting arguments not made within
23 that time is waived. Following receipt of the Respondent's
24 objections and supporting arguments, the State and the
25 Respondent shall then have thirty (30) Days to resolve their

1 differences. If agreement cannot be reached within the 30-Day
2 period, the State reserves all rights it has to bring an action
3 against Respondent under applicable federal or state law, to
4 recoup all recoverable costs as set forth in the accounting,
5 together with allowable interest and damages and penalties, not
6 reimbursed by the Respondent. Respondent reserves its right to
7 contest all such claims.

8 F. If the Respondent contests payment of any of the
9 State's remedial action costs included within an accounting
10 submitted pursuant to paragraph B of this Section XXI and such
11 costs are subsequently found to be due and owing the State, the
12 Respondent may be liable to the State for damages in an amount
13 of two (2) times the amount of the remedial action costs in
14 dispute, plus two (2) times the costs incurred in bringing such
15 suit, including attorneys' and expert witness fees and expenses.

16 G. The State reserves all rights it has to recover any
17 future costs incurred by the State in connection with investiga-
18 tion, remedial or response activities at the Facility pursuant
19 to applicable federal and state law (including state common
20 law).

21 H. Upon payment of all past costs due the State as
22 described in paragraph A. of this Section, the State releases
23 Respondent from any further liability for costs incurred at the
24 Facility prior to the effective date of this Consent Order.
25 This paragraph shall in no way affect Respondent's liability for

1 costs incurred subsequent to the effective date of this Consent
2 Order, except for costs paid by the Respondent pursuant to this
3 Section.

4 I. For purposes of paragraphs A through E, inclusive, of
5 this Section XXI, the term " remedial action cost" shall
6 include:

7 1. all costs of all activities included within the
8 definitions of the terms "removal," "remedial action," and
9 "response" in CERCLA Sections 101(23), (24) and (25),
10 respectively, 42 U.S.C. §§ 9601(23), (24) and (25); which
11 are consistent with the NCP; and

12 2. all costs that fall within the definition of
13 remedial action costs as defined in MCA § 75-10-701(15)
14 which are consistent with the NCP.

15
16 XXII.

17 NATURAL RESOURCE DAMAGE ASSESSMENT

18 The Parties agree that it is cost efficient and desirable
19 to perform a natural resource damage assessment on the Facility
20 prior to issuance of the record of decision. The Parties also
21 agree that to the extent determined by the State, the Respondent
22 should be allowed to participate in the natural resource damage
23 assessment. Within sixty (60) days of the effective date of
24 this Consent Order, the State agrees to provide the Respondent
25 the opportunity to participate in a scoping meeting to discuss

1 the proposed study, and the State will subsequently offer the
2 Respondent the opportunity to conduct environmental data
3 sampling that will be used in assessing the environmental injury
4 to natural resources at the Facility.

5 The Respondent agrees to provide the State \$100,000 (one
6 hundred thousand dollars) within thirty (30) days of the
7 effective date of this Consent Order to perform a natural
8 resource damage assessment at the Facility. Any money not
9 expended by the State for the natural resource damage assessment
10 shall be returned to the Respondent. The State shall include
11 documentation, as described in paragraph XXI.B., regarding the
12 expenditure of the funds provided for natural resource damage
13 assessment in the quarterly accounting required by paragraph
14 XXI.B. Validated environmental sampling data and natural
15 resource damage assessment reports generated by the State or its
16 contractor(s) for which the State seeks to recover costs under
17 this Consent Order will be shared with the Respondent when
18 available and no later than ten (10) Days in advance of the next
19 quarterly meeting between the State and Respondent to be held
20 pursuant to Section X.J. However, nothing in this Section shall
21 require the State to make documents available to the Respondent
22 which are otherwise privileged under State law and regulation.
23 The amount provided under this Section shall not represent a cap
24 on expenditures for natural resource damage assessment
25 activities, but rather represents only the amount the Respondent

1 is agreeing to provide pursuant to this Consent Order.
2 Notwithstanding Section XXXI, the State reserves all of its
3 rights to seek additional agreements from Respondent, or to
4 recover funds expended on natural resource damage assessment
5 activities that exceed the amount identified above provided
6 pursuant to this Consent Order.

7 The Respondent agrees not to use the terms of this Consent
8 Order, or the fact that money was provided for natural resource
9 damage assessment activities pursuant to this Consent Order, as
10 a defense to reimbursement of such costs. The Respondent's
11 payment of funds for a natural resource damage assessment
12 pursuant to the terms of this Consent Order is not an admission
13 of liability for any such damages. The Respondent reserves its
14 rights to deny liability for natural resource damages and to
15 contest the activities and conclusions of the State in
16 connection with the natural resource damage assessment as well
17 as any additional assessment costs incurred by the State which
18 exceed the amount identified above. This Section of this
19 Consent Order shall not be admissible into evidence or otherwise
20 used by the State in any proceeding other than a proceeding to
21 enforce the terms of this Section.

22
23 XXIII.

24 RESERVATION OF RIGHTS

25 A. The State retains the right to conduct other investiga-

1 tions and activities at the Facility. Subject to Section XXXI,
2 nothing herein shall preclude the State from undertaking any
3 additional enforcement actions it may deem necessary for any
4 purpose, including the prevention or abatement of an imminent
5 and substantial danger to health, welfare or the environment
6 arising from site conditions. The State further retains all
7 rights against Parties not privy to this Consent Order which may
8 arise out of the facts on which this Consent Order is based.
9 Notwithstanding compliance with the terms of this Consent Order,
10 the Respondent is not released from liability for any actions
11 for which the Respondent is otherwise liable under law.

12 B. The State reserves the right to take appropriate
13 enforcement action, including the right to seek injunctive
14 relief, monetary penalties, and all other appropriate relief
15 available, pursuant to all applicable federal or state statutory
16 and common law, for any violation, failure, or refusal to comply
17 with this Consent Order. In addition, if the Respondent fails
18 to remedy noncompliance with this Consent Order in a timely
19 manner, the State may, after notification to the Respondent,
20 initiate State- or EPA-funded response actions and may
21 subsequently pursue cost recovery against Respondent, including
22 actions for punitive damages.

23 C. Nothing herein shall be construed to release the
24 Respondent from any liability for failure of the Respondent to
25 perform the required activities in accordance with the require-

Date		Description		Amount	
1901	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	
1902	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	
1903	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	
1904	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	

1 ments of this Consent Order, the Work Plan and Supplemental Work
2 Plans. Except for claims covered by paragraph XXI.H. of this
3 Consent Order, the Parties further expressly recognize that this
4 Consent Order and the successful completion of activities
5 required by this Consent Order and plans established thereunder
6 do not represent satisfaction, waiver, release of, or covenant
7 not to sue with regard to any claim of the State of Montana
8 against the Respondent relating to the Facility (including
9 claims to require the Respondent to undertake further response
10 actions and claims to seek reimbursement of response costs
11 incurred subsequent to the effective date of this Consent
12 Order).

13 D. Except as provided in Section XXIII.E., Respondent
14 retains all rights to claim contribution as permitted by CECRA
15 and CERCLA against any person, including the United States as
16 the owner or operator of a facility releasing Hazardous or
17 Deleterious Substances into the environment. Nothing in this
18 Consent Order is intended to create any private causes of action
19 in favor of any Persons not a Respondent.

20 E. Based upon the assertions in Section III.I, Respondent
21 agrees to waive contribution claims against the State which may
22 arise out of or relate to its operation of the ground water
23 system at the Facility described in paragraph III.I, provided
24 that the State does not alter or modify the existing system
25 without the concurrence of the Respondent.

1 F. Respondent denies any and all legal or equitable
2 liability under any federal or state statute, regulation,
3 ordinance or common law for any response costs, damages or other
4 liability caused by or arising out of conditions at or arising
5 from the Facility except as agreed to in Section VI. Except as
6 provided in paragraph VI.C, XIX.A, XX.I, and this paragraph,
7 Respondent specifically denies all Findings of Fact, Conclusions
8 of Law and Determinations or any other allegations contained in
9 this Consent Order and attachments thereto and such findings,
10 conclusions of law and determinations shall not be used in any
11 other proceeding by the State, other than proceedings to enforce
12 this Consent Order or for any purpose in this proceeding except
13 to establish jurisdiction. This Consent Order shall not create
14 in any third party any rights which would not otherwise exist;
15 nor shall this Order be relied upon by third parties to assert
16 a cause of action or claim against Respondent. Nothing in this
17 Consent Order shall preclude, however, the Respondent from using
18 this Consent Order, or the fact of its entry, against any person
19 for contribution or for recovery of costs expended in complying
20 with this Consent Order, except as specifically waived in this
21 Consent Order.

22 G. No payment made by Respondent to pay for and implement
23 the Work or any other activities required under this Consent
24 Order, other than payment of stipulated penalties, shall be
25 deemed to be a fine, penalty, or monetary sanction.

XXIV.

PUBLIC COMMENT AND COMMUNITY RELATIONS

A. Within ten (10) days of the date of signature of this Consent Order by the Respondent, the State shall announce the availability of this Consent Order to the public for review and comment. The State shall accept comments from the public for a minimum of thirty (30) Days after such announcement. At the end of the comment period, the State shall review all such comments and shall either:

1. determine that this Consent Order should be made effective in its present form, in which case the Respondent shall be so notified in writing; or

2. determine that modification of this Consent Order is necessary, in which case the Respondent will be informed in writing as to the nature of all changes deemed necessary by the State. If the Respondent agrees to the modifications, the Consent Order shall be so modified. In the event that the Respondent does not agree to modifications required by the State as a result of public comment, the dispute as to the modification shall be submitted to the Chief of the Solid and Hazardous Waste Bureau for attempted resolution. No modification to this Consent Order shall be made except by agreement of the Parties. In the event that the Respondent does not agree to modifications required by the State as a result of public

comment, this Consent Order shall be null and void.

B. The Respondent shall cooperate with the State in providing FS information to the public. Upon the reasonable request of the State, the Respondent shall participate in the preparation of all appropriate information disseminated to the public and in public meetings which may be held or sponsored by the State to explain activities at the Montana Pole Site or concerning the FS process at the site.

XXV.

INDEMNIFICATION

A. The Respondent agrees to indemnify and save and hold harmless the State of Montana, its agencies, departments and employees acting in their capacity as regulatory agencies overseeing actions required by this Consent Order from any and all claims or causes of action arising from, or on account of, acts or omissions of the Respondent, its agents, or assigns, in carrying out the activities performed pursuant to this Consent Order.

B. For purposes of this Section only, the phrase "claims or causes of action" shall be deemed to include, but not be limited to all claims of officers, agents, and employees of the State for personal injury or property damage.

1 XXVI.

2 DISCLAIMERS

3 No Party shall be held as a Party to any contract entered
4 into by another Party or its employees, agents, or Contractors
5 in carrying out activities pursuant to this Consent Order. In
6 addition, no Party shall be liable for any injuries or damages
7 to Persons or property resulting from acts or omissions of
8 another Party or its employees, agents or contractors in
9 carrying out the activities pursuant to this Consent Order.

10
11 XXVII.

12 NOTICE OF RIGHT TO CLAIM
13 CONFIDENTIALITY OF BUSINESS INFORMATION

14 The Respondent may, if it desires, assert a business
15 confidentiality privilege covering part or all of the informa-
16 tion requested by this Consent Order. In order to assert the
17 privilege, Respondent may either obtain a declaratory judgment
18 from a court of competent jurisdiction or label the information
19 as confidential pursuant to Section 16.44.1008 of the Ad-
20 ministrative Rules of Montana. A label of confidentiality is
21 subject to acceptance by the State. If no such designation or
22 judgment accompanies the information when it is received by the
23 State, the State may make it available to the public without
24 further notice to the Respondent. This provision shall not
25 limit any other claims of privilege by Respondent with respect

1 to documents or information exempt from disclosure by law.

2
3 XXVIII.

4 ADMINISTRATIVE RECORD

5 A. The State shall maintain the administrative record for
6 the Facility, including documents generated as a result of this
7 Consent Order, and the Respondent agrees to cooperate with the
8 State in the preparation of the administrative record. The
9 administrative record shall include, but not be limited to, all
10 documents and data submitted by the Respondent pursuant to this
11 Consent Order, all correspondence between the State and the
12 Respondent relating to implementation of this Consent Order, and
13 all documents described in EPA's Administrative Record Guidance
14 (Attachment 3). The administrative record shall also include,
15 but not be limited to, all correspondence between EPA and the
16 State as provided under CERCLA, the NCP, and applicable EPA
17 guidance.

18 B. Notwithstanding the preceding sentence, EPA and the
19 State reserve the right to protect from disclosure to the
20 Respondent and the public any documents and communications
21 protected from disclosure under applicable federal and state
22 law. A list of confidential documents included in the ad-
23 ministrative record shall be maintained in the administrative
24 record available to the public.

1 XXIX.

2 SUBSEQUENT MODIFICATION AND EFFECTIVE DATE

3 This Consent Order may be amended by the mutual agreement
4 of the State in consultation with EPA and the Respondent.
5 Such amendments shall be in writing and shall be effective as of
6 the date the amendment is signed by the State.

7 In the event the State determines that this Consent Order
8 should be made effective in its present form following public
9 comment, the effective date shall be the date on which Respon-
10 dent receives written notice pursuant to Section XXIV. In the
11 event that this Consent Order is modified by agreement of the
12 State and the Respondent following public comment, the
13 effective date of such modified Consent Order shall be the
14 date on which it is signed by the State.

15
16 XXX.

17 CONTRIBUTION PROTECTION

18 Pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C.
19 §9613(f)(2) and MCA 75-10-719(1), Respondent shall not be
20 liable to other persons or entities for contribution claims
21 regarding the Work required by or costs covered by this
22 Consent Order.

23 XXXI.

24 COVENANT NOT TO SUE

25 So long as Respondent is performing the Work required by

1 this Consent Order and is in compliance with this Consent Order,
2 the State covenants not to sue, issue any order, or take other
3 administrative or judicial action against, or assert any claim
4 against Respondent with respect to the Work. However, nothing
5 in this Section, or in this Consent Order, shall limit the
6 State's ability to respond to an imminent and substantial
7 endangerment to public health, welfare, safety, or the
8 environment.

9
10 XXXII.

11 TERMINATION AND SATISFACTION

12 This Consent Order shall terminate when the Respondent
13 certifies that all activities required under this Consent Order
14 have been performed (the "Certification"), and the State, in
15 consultation with EPA, has accepted the Certification. The
16 State shall accept or reject the Certification by the Respondent
17 within six (6) months of submittal of the Certification of the
18 Respondent. Sections VI(C) and (D), XVII, XVIII, XXI, XXIII,
19 XXV, XXIX, XXX, XXXI, and this Section shall survive termina-
20 tion of this Consent Order. If the State accepts the
21 Certification, Respondent shall not be liable for any additional
22 investigation of the Facility except, if, subsequent to the
23 Certification:

- 24 1. conditions at the Facility, previously unknown to DHES,
25 are discovered; or

1 2. new information is received by DHES, in whole or in
2 part, and DHES, based upon these previously unknown
3 conditions or this new information determines that the
4 Remedial Investigation/Feasibility Study is not adequate to
5 choose a remedy which is protective of public health,
6 welfare or safety, or the environment. In the event such
7 a determination is made by DHES, a written opinion shall be
8 prepared by DHES which sets forth all factual information,
9 analytical data and previously unknown conditions upon
10 which DHES may rely in determining that the RI/FS is not
11 adequate. The written opinion shall be made part of the
12 administrative record. This Section XXXII shall in no way
13 affect the right of the State to respond to an imminent and
14 substantial endangerment to public health, welfare, safety
15 or the environment by either ordering Respondent to
16 undertake a removal action, or undertaking a removal action
17 itself and seeking the recovery of costs expended from the
18 Respondent.

19
20 XXXIII.

21 AUTHORITY OF SIGNATORIES

22 Each of the signatories of this Consent Order states that
23 he or she is fully authorized to enter into the terms and
24 conditions of this Consent Order and to bind legally the Party
25 represented by him or her to the Consent Order.

1 IT IS SO AGREED:

ARCO COAL COMPANY

2
3 4-23-90
Date

Richard Krohn
ARCO COAL COMPANY
On behalf of the Atlantic
Richfield Company

6 STATE OF COLORADO)
7) ss.
COUNTY OF DENVER)

8 Before me appeared RICHARD KROHN, on
9 behalf of ARCO, this 23RD Day of
10 APRIL, 1990, who states and acknowledges that
he is an authorized officer of the company and has authority to
sign the foregoing Administrative Order and Consent on behalf of
11 ARCO, and does so of his own free will.

12 WITNESS my hand and official seal.

13
14 (Notarial Seal)

Thomas J. Craig
Notary Public
Residing at: Denver, CO
My commission expires: 2-15-93

17 IT IS SO ORDERED:

STATE OF MONTANA
DEPARTMENT OF HEALTH AND
ENVIRONMENTAL SCIENCES

20
21 April 25, 1990
Date of Issuance

for William J. Pizzini
DONALD E. PIZZINI, Director
Montana Department of Health and
Environmental Sciences

SPECIFICATIONS FOR DEVELOPMENT OF A
DATA MANAGEMENT PLAN

April 17, 1990

SECTION I DATA MANAGEMENT PLAN: A. A data management function will be developed which will insure the capability of communicating all data collected during the <insert activity name> activities identified in this plan to the Clark Fork Data System, while minimizing the need for restructuring, filtering, or augmenting the data to facilitate its integration into the data system. <CONTRACTOR/PRP> will prepare a Data Management Plan (DMP) for the project. The DMP will document how <CONTRACTOR/PRP> will record and manage data collected. Specifically, the DMP will detail compliance with Sections II through IV below.

B. <CONTRACTOR/PRP> will submit the DMP for review a minimum of <insert days> days prior to commencement of data collection and will modify the DMP as directed to insure compatibility with the Clark Fork Data System, and to provide for expeditious incorporation of data into the system.

SECTION II REPORTING FREQUENCY and TRANSFER FORMAT: A. [Insert wording here to set forth the schedule for submission of data (i.e. "Upon completion of the contract..."; "At the intervals specified...";etc)], <CONTRACTOR/PRP> will submit accumulated data and accompanying documentation to [insert wording here to describe who is to receive data (i.e. SPO/RPM/Data System Administrator/GIS Officer)].

B. Except as noted under SECTION B-4, data will be submitted in machine readable format as follows:

1. High or low capacity 3½" or 5¼" diskette. Data may be loaded to diskette using a PC DOS compatible backup utility with advance approval from the data system administrator.
2. Data cartridges compatible with Irwin Magnetic Systems tape drive model 265, loaded using Irwin Magnetic EzTape version 1.3 or fully compatible alternate.
3. Digital map coverage data to be communicated directly to the GIS may be provided on 9-Track computer tape @ 1600 or 3200 bpi.
4. [Insert special conditions here which would allow for data to be submitted in hard copy only.]

SECTION III DOCUMENTATION: A. The following documentation shall accompany all data submitted for inclusion in the data system:

- Name of responsible agency or company
- Contact name and address
- Scope and extent of package with respect to applicable work plan and SAP
- Related QC information
- Fully completed coding forms (unless data is provided in machine

readable format)

- Maps and explanations of all map data codes
- Relevant field notes.
- Method of data input
- Field definitions for fields not defined within the Clark Fork Data System
- Range of data values (min/max)
- Target table and field names
- Record length, number of records, field and record delimiter used

B. The following additional documentation shall accompany all map data in digital format submitted for inclusion in the data system:

- Date of creation
- Method of data input (e.g., digitized, scanned, etc.)
- Specifications of equipment used (e.g., digitizer resolution: 1/1000")
- Map source (e.g., USGS 7½ minute Topographic Quadrangle)
- Map medium (e.g., paper, mylar, etc.)
- Map Scale/Projection
- Registration tics used
- Processing and post-processing software used
- QA/QC procedures performed
- A copy of the source map used

SECTION IV FORMAT: A. Data submitted for inclusion in the data system shall be in a format as described in <ATTACHMENT A>, SPECIFICATIONS FOR SUBMISSION OF DATA FOR INCLUSION IN THE CLARK FORK DATA MANAGEMENT SYSTEM.

B. Data to be communicated directly to the GIS Officer as directed in SECTION II REPORTING shall be in a format as described in <ATTACHMENT B>, SPECIFICATIONS FOR SUBMISSION OF DATA FOR INCLUSION IN THE CLARK FORK GEOGRAPHIC INFORMATION SYSTEM.

SECTION V RESPONSIBILITIES and DATA FLOW: A. Data flow through each of the involved entities (EPA, DHES, PRPs, contractors, labs, data validators) and the data related responsibilities of each entity must be described.

SECTION VI DATA USE: A. The categorization of data as to possible use, based on the field and lab methodology, handling and documentation, must be described.

ATTACHMENT A

SPECIFICATIONS FOR SUBMISSION OF DATA FOR INCLUSION IN THE CLARK FORK DATA MANAGEMENT SYSTEM

April 17, 1990

The State of Montana Department of Health and Environmental Sciences has selected the Environmental Information System (EIS) for use in fulfilling the data management objectives with respect to the Upper Clark Fork River Superfund Sites. The Environmental Information System is a set of table, form, and program files developed by M. D. Swayne (Environmental Systems Corporation, Redmond, WA) that implements data, integrity and operator models. The EIS provides: a data model appropriate to managing a wide variety of environmentally related information, an implementation of this model using a modern data base engine in a personal computer environment, and an operator interface which facilitates routine data management tasks such as data entry, retrieval, reporting and integrity checking.

SYSTEM COMPATIBILITY DEFINITION

It is important that organizations collecting data destined for the Clark Fork Data System and/or desiring to use Clark Fork Data System data develop or use a compatible data management function.

Compatibility can be defined with respect to three levels:

1. Data model definition
2. Data model implementation
3. Operator interface

Compatibility at the data model definition level is required. Compatibility at the data model implementation and operator interface levels provides greater utility and efficiency but is not required.

EIS DATA MODEL DEFINITION COMPATIBILITY

Compatibility with respect to EIS data model definitions is required to ensure that data is defined in the same manner to ensure accurate, explicit and efficient data transfer. The following is a list of EIS data models together with compatibility requirements:

- A. Conceptual model - Relational data base - Required.

The relational data model is the overall conceptual data structuring device for the EIS. The relational data model is a general mathematical model which can be used to organize any type of information. The relational model defines: domains and relations as object types; update, retrieval and viewing operators; and valid state, and transaction monitoring integrity rules. Other conceptual data models, such as hierarchical or

network models, that use pointers to link records, are not directly compatible with the EIS. Data communication between relational and non-relational systems requires restructuring which can be tedious and time consuming.

B. Subject data models - One or more relational tables - Required.

The EIS defines subject environmental data models within the relational data model framework. Subject data is required to be organized and stored according to one or more of the following subject models. Data that are organized into different relational structures will require reorganization into the following before communication is possible.

- o Hydrologic Units - USGS/WRC
- o Surface water reaches - EPA/USGS
- o Political/Admin. areas - USGS DLG code types
- o Public lands areas - USGS DLG codes
- o Transportation - USGS DLG code types
- o Utility lines - USGS DLG code types
- o Cultural features/areas - EIS ID codes
- o Environmental surveys - EIS ID codes
- o Environmental stations - EIS ID codes
- o Environmental samples - EIS ID codes
- o Environmental field data - EIS ID codes
- o Environmental lab data - EIS ID codes
- o Laboratory QC - EIS ID codes
- o Documents - EIS ID codes
- o Coded field values - EIS codes
- o Name (People) codes - EIS ID codes
- o Organization codes - EIS ID codes

Detailed specifications of each subject table can be obtained in the form of table (relation), form (data coding and screen display), and field (attribute) definitions. The evolving nature of the data system prohibits inclusion of the definitions herein; current information can be obtained from the data system administrator.

C. Data integrity model - Required.

The data integrity model implements the integrity requirements of the relational model by defining: domain names for fields, valid domain values or ranges for fields, and field coding instructions. The most important aspect from a data communication aspect is that each system use the same domains from which attribute values are drawn. For example, if a field in each of two system has the same intended purpose but each uses coded values that are drawn from two different domains for which a one-to-one correspondence cannot be established by adding values to one of the domains, then it will be impossible to communicate data for this field between the systems and still maintain integrity. The evolving nature of the data system prohibits inclusion of the domains of acceptable values herein; current information can be obtained from the data system administrator.

Data integrity is systematically checked by the data system. However, it is desirable that data imported into the system have been previously checked to reduced the iterations required to establish integrity. For example, any data not found to have integrity will be flagged as unusable. Fields and field values that refer to domain names or domain values not defined require the data system administrator to contact the data originator to make changes. Data that does not conform to the integrity model will not pass the integrity checks cannot be made available for retrieval.

DATA MODEL IMPLEMENTATION COMPATIBILITY

The EIS data model is implemented using a standard relational data base engine called Knowledgeman (KMan) v2.06 (Micro Data Base Systems, Inc., Lafayette, In), which runs on IBM PC compatible computers under PCDOS. It is not required that the data model be implemented using the EIS or Knowledgeman; however, absolute compatibility can be achieved through implementation using the EIS and Knowledgeman, both of which are available commercially.

It is required at this time that the data models be implemented in an operating system environment capable of importing and exporting PCDOS compatible relational table files in any of the following formats:

REQUIRED EXPORT CAPABILITY

- o KMan table files, or
- o ASCII files (variable columns, any unique character delimiter, with one line corresponding to one record), or
- o DIF files, or
- o BASIC Compatible files, or

- o Unquoted ASCII files, or
- o SDF files (fixed columns, no delimiter, one line corresponds to a record), or
- o SYLK files (Multiplan format), or
- o WKS (Lotus 123 v1, v1A, or v2 binary files), or
- o dBASE III or dBASE IV table files.

REQUIRED IMPORT CAPABILITY

- o KMan table files, or
- o ASCII files (one field/expression value per line, strings quoted, and records delimited by blank lines), or
- o DIF (Data Interchange Format) files (see Technical note SATN-10, 1980, Software Arts, Inc.), or
- o BASIC files (Logicals equal 1 for TRUE and 0 for FALSE, strings are double quoted, numbers have leading blank for positive values and leading minus sign for negative values, data values are delimited by commas), or
- o Unquoted ASCII files (one field/expression value per line, strings unquoted, and records delimited by blank lines), or
- o ASCII files (variable columns, any unique character delimiter, with one line corresponding to one record), or
- o SDF files (fixed columns, no delimiter, one line corresponds to a record), or
- o SYLK files (strings enclosed in a matching pair of double quotes, numbers unchanged, login as unquoted string TRUE or FALSE), or
- o DBF files (dBASE III or IV format).

Examples of the described file formats are available from the data system administrator on request.

OPERATOR INTERFACE COMPATIBILITY

The operator interface is implemented using the KMan data base facilities and procedural language. It is not required that a compatible operator interface be developed. However, an EIS data model compatible operator interface has been implemented using Knowledgeman, both of which are available commercially.

COMPATIBILITY TOOLS

The following reference material is available from the Clark Fork Data System Administrator:

- Coding Forms - all data system tables
- General Form Coding Instructions
- Table Specific Form Coding Instructions
- Tables of acceptable values for all coded references

Compatibility can be established manually during the data collection phase by using the data system coding forms and instructions. These forms and instructions follow the data system structure and definitions, hence their use ensures relational and subject data model compatibility. The data on these forms can then be manually communicated to the data system and entered, if the volume of data is minimal and DHES agrees to perform the data entry.

If the data collection contract or order calls for communication of the data in machine readable format, the agency or organization collecting the data can either develop an implementation that conforms to the data system relational and subject data models or has the ability to convert data to this structure prior to communication.

ATTACHMENT B

SPECIFICATIONS FOR SUBMISSION OF DATA FOR INCLUSION IN THE CLARK FORK GEOGRAPHIC INFORMATION SYSTEM

All digital data supplied to the Clark Fork GIS must be in the form of ASCII data files. It is preferred that spatial data and their attributes are transferred to the GIS as ARC/INFO map coverages. Other acceptable data formats are: USGS Digital Line Graph (DLG-3 Optional format); ERDAS GIS Files; MOSS; and DIME. Attribute codes used for the map coverages should conform to the specifications outlined above. Any exceptions should be documented.

Specific information for line or polygon data input may be obtained by contacting the Clark Fork GIS staff at the Montana State Library, 1515 East 6th Avenue, Helena, MT 59620. Contact Allan Cox, GIS Officer, at (406) 444-5357.

- Point data must consist of two separate ASCII files as defined below:

File 1 will be the Data File. This data file will have:

- Spatial coordinates (X,Y) preferably expressed as Universal Transverse Mercator Coordinates in UTM Zone 12 (UTM Zone 13 in areas west of East Missoula). Other acceptable data coordinates are Latitude/Longitude expressed in decimal degrees, or State Plane Coordinates (SPC) with the SPC zone documented. If necessary, Anaconda Mineral Company Coordinates may be accepted. Point data located using the United States Public Land Survey System (township/range) are not acceptable.

- A field that contains a unique identification number for each point feature.

- A field that documents the locational accuracy of the point data must be included with the data. For example, an entry of 50 would indicate the point locations are accurate to ± 50 feet. This field will be named **ACCURACY** and will be defined as an **INTEGER** type with an **INPUT WIDTH** of 5 and an **OUTPUT WIDTH** of 5.

- The remaining fields in the Data File will be additional locational information or descriptions, and attribute data related to the point locations.

The ASCII Data File should contain one line of less than 80 characters for each data record. If it is not possible to fit the entire data record into a line of < 80 characters, then all fields must contain the same number of characters on each line. Every item or field in the file must be separated by some delimiter that does not appear within any of the fields, such as a pound sign (#) or bar (|). It is recommended that the bar (|) be used. Figure 1 shows two records from a database and what their ASCII records in the Data File would look like using the bar (|) as the delimiter.

	STATION	NORTHSP	EASTSP	ELEVATION	LOCATION
Original	A-7	1884327	882376	3209	Int. of So. & Brooks
	A-12	1893224	884235	4795	Top of Mt. Jumbo
ASCII	A-7 1884327 882376 3209 Int. of South & Brooks				
	A-12 1893224 884235 4795 Top of Mt. Jumbo				

Figure 1: Example of two data file records as they would appear in the ASCII Data File.

File 2 will be a Data Definition File. This file will contain the name for each field in the Data File, its type (integer, binary, character, etc.), the input width of the field, the output width of the field.

Field Names and Definitions: You **MUST** define **EVERY** item that appears in the Data File, and these definitions **MUST** appear in the Data Definition File in the same order as the items appear in the Data File. An item definition consist of:

- the item's **NAME**,
- the item's **WIDTH** in number of bytes used to store it,
- the **OUTPUT WIDTH** required to print the item's value,
- the **TYPE** of item, and
- the number of **DECIMAL PLACES** for type F (floating) and N (numeric) items.

Each of these entries must appear on a separate line. Figure 2 gives examples of items and their definitions.

Sample Data Item Definitions				
Item Name	Input Width	Output Width	Type	Decimal Places
Survey	7	7	C	
Station	6	6	C	
Latitude	10	10	C	
Longitude	11	11	C	
X-Coordinate	4	10	F	1
Y-Coordinate	4	10	F	1
Date	8	8	D	
Depth	4	8	F	3
Accuracy	2	6	B	
Sphere	2	2	C	
Lead	4	8	F	3
Cadmium	4	8	F	3
Arsenic	4	8	F	3

Figure 2: Examples of item names and definitions for to be used in the Data Definition File.

Figure 3 illustrates the way the ASCII Data Definition File would look.

Sample ASCII DATA DEFINITION FILE	
Survey	
7	
7	
C	
Station	
6	
6	
C	
Latitude	
10	
10	
C	
Longitude	
11	
11	
C	
X-COORDINATE	
4	
10	
F	
1	
Y-COORDINATE	
4	
10	
F	
1	
Date	
8	
8	
D	
Depth	
4	
8	
F	
3	

Figure 3: A sample Data Definition File.

ATTACHMENT 2

DOCUMENT SCHEDULE

Supplemental Work Plan
and SAP, if required,
for Additional Work

30 days following meeting with
DHES to discuss Supplemental
Scope of Work for Additional
Work within the scope of the
original Work Plan as defined by
the Consent Order, Section XI

Technology Screening
Document

90 days after the effective date of
the Consent Order as defined by
Section XXIX

Alternative Screening
Document (ASD)

The ASD shall be submitted by the
Respondent upon the concurrence of
the following events, whichever
occurs later: 120 days following
Respondent's receipt of DHES final
comments on the Technology Screen-
ing Document, and 120 days follow-
ing a meeting between DHES and
Respondent to review comments on
the Technology Screening Document.

Final Treatability
Work Plan

30 days following Respondent's
receipt of DHES final comments on
the ASD

Draft RI Report

60 days following DHES acceptance
of Respondent's data validation
reports for the Fall 1990 sampling
event.

Final Draft RI Report

The Final Draft RI Report shall be
submitted by Respondent upon the
concurrence of the following
events, whichever occurs later: 45
days following Respondent's receipt
of DHES final comments on the Draft
RI Report, and 45 days after
meeting between DHES and Respondent
to discuss comments received from
DHES on draft RI report.

Preliminary Draft RI/FS

The Preliminary Draft RI/FS shall be submitted upon the concurrence of the following events, whichever occurs later: 30 days after final approval of the Treatability Work Report; 60 days following the data review meeting between the Respondent and DHES to discuss data generated from the fall 1990 sampling event; 60 days following DHES approval of the Final Draft RI Report; 60 days following the completion and DHES approval of any additional work performed by Respondent pursuant to a Supplemental Work Plan; 60 days after Respondent's receipt of DHES final endangerment assessment.

Final Draft RI/FS Report

The Final Draft RI/FS Report shall be submitted upon the concurrence of the following events, whichever occurs later: 45 days after Respondent's receipt of DHES final comments on Preliminary Draft RI/FS Report, and 45 days after a meeting between DHES and Respondent following receipt of DHES comments on the Preliminary Draft RI/FS.

Draft Final RI/FS Report

The Draft Final RI/FS shall be submitted upon the concurrence of the following events, whichever occurs later: 30 days after Respondent's receipt of DHES directions for revision and completion, and 30 days after a meeting between DHES and Respondent to discuss comments received by DHES during public comment period on the Final Draft RI/FS.

Final RI/FS Report

30 days after Respondent's receipt of DHES final comments on the Draft Final RI/FS

ATTACHMENT 3

GUIDANCE DOCUMENTS

U.S. EPA. 40 CFR Part 300. National Oil and Hazardous Substances Contingency Plan, as revised effective April 9, 1990.

U.S. EPA. October 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA. Interim Final. OSWER Directive No. 9255.3-01.

U.S. EPA. December 1987. Compendium of Superfund Field Operations Methods. OSWER Directive 9355.0-14, EPA/540/P-87/00/a (also called Compendium).

U.S. EPA. August 1988. CERCLA Compliance with Other Laws Manual. Draft. EPA/540/G-89/006.

U.S. EPA. August 1989. CERCLA Compliance with Other Laws Manual, Part II. OSWER Directive 9234.1-02.

U.S. EPA. August 1988. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites. Draft. OSWER Directive No. 9283/1-2.

U.S. EPA. September 1988. Technology Screening Guide for Treatment of CERCLA Scils and Sludges. EPA/540/2-88/004.

U.S. EPA. March 1987. Data Quality Objectives for Remedial Response Activities. OSWER Directives 9335.07A and 07B. (Also called DQO Guidance.) U.S. EPA, Washington, D.C.

U.S. EPA. April 1985. Characterization of Hazardous Waste Sites - A Methods Manual. Volume II. EPA/600/4-84/075.

U.S. EA. July 1989. Risk Assessment Guidance for Superfund. Human Health Evaluation Manual. Part A. Interim Final. OSWER Directive No. 9285.701A.

U.S. EPA. January 1986. Superfund Exposure Assessment Manual. Draft. OSWER Directive 9285.5-01. U.S. EPA, Washington, D.C.

U.S. EPA. January 1989. Interim Final Guidance for Soil Ingestion Rates. OSWER Directive No. 9850.4.

National Institute for Occupational Safety and Health. 1985. Guidance Manual for Superfund Activities. Volumes 1-9. U.S. Department of Health and Human Services, National Institute for Occupational Safety and Health, Cincinnati, Ohio.

NIOSH/OSHA/USCG/USEPA. 1985. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities. U.S. DHHS.

U.S. EPA. August 1986. Applicability of RCRA Requirements to CERCLA Mining Waste Sites. OSWER Directive No. 9234.0-04.

U.S. EPA. August 1988. Superfund Analytical Data Review and Oversight. OSWER Directive No. 9240.0-03.

U.S. EPA. 1979. Methods for Chemical Analysis of Water and Wastes, EPA-600-4-79-02.

U.S. EPA. 1983. Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (QAMS-005/80) EPA-600/4-83-004.

U.S. EPA. November 1986. Test Methods for Evaluating Solid Wastes, 3rd Ed. (SW-846).

U.S. EPA. March 1989. Interim Guidance on Administrative Records for Selection of CERCLA Response Actions. OSWER Directive No. 9833.3A.

ATTACHMENT 4

STATE LAW AND REGULATION AUTHORITIES

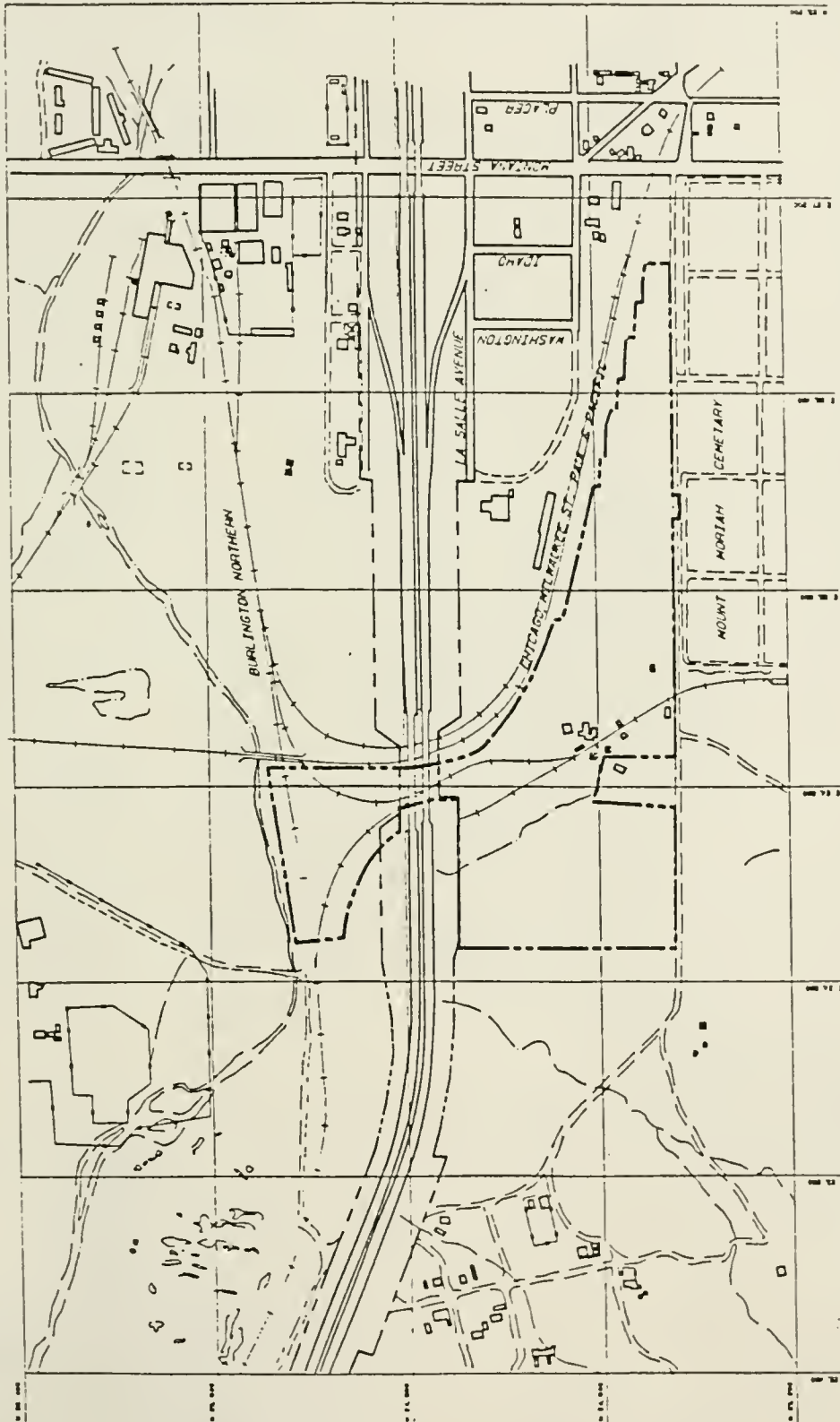
STATUTORY AUTHORITIES

- The Comprehensive Environmental Cleanup and Responsibility Act (CECRA) codified at MCA §§ 75-10-701 et. seq.
- The Montana Hazardous Waste Management Act codified at MCA §§ 75-10-401 et. seq.
- The Solid Waste Management Act codified at MCA §§ 75-10-201 et. seq.
- The Montana Water Quality Act codified at MCA §§ 75-5-601 et. seq.
- The Occupational Health Act of Montana codified at MCA §§ 50-70-101 et. seq.
- The Antiquities Act codified at MCA §§ 22-3-421 et. seq.
- The Streambed Protection Act codified at MCA §§ 75-7-101 et. seq.
- The Floodplain and Floodway Management Act codified at MCA §§ 76-5-101 et. seq.

REGULATORY AUTHORITIES

- The hazardous waste rules found at ARM parts 16.44.101 et. seq.
- The solid waste rules found at ARM parts 16.14.500 et. seq.
- The water quality rules found at ARM parts 16.20.601 et. seq.
- The water well contractor rules found at ARM parts 36.21.401 et. seq. and 36.21.635-.680 and 36.21.701-.703
- The groundwater protection rules found at ARM parts 16.20.1001 et. seq.
- The occupational health rules found at ARM parts 16.42.101 et. seq.
- The cultural resource rules found at ARM parts 12.8.501 et. seq.
- The floodplain management rules found at ARM parts 36.15.201 et. seq. and 36.15.601 et. seq.

ATTACHMENT 5 - SITE MAP



MONTANA POLE AND TREATING
SITE MAP
ANACONDA AREA
BUTTE, MONTANA

710333

SCALE (FEET)
0 200 400 800

